# 30% CONCEPTUAL PLAN VAN DORN & BEAUREGARD BIKE FACILITY \$ SHARED USE PATH ALEXANDRIA, VIRGINIA

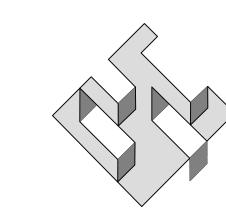
PROJECT NUMBERS STATE PROJECT # - U000-100-814 FEDERAL JOB # - PIOI FEDERAL #CMAQ-5B01(105) UPC# - 105563 RFQU # - 912 CCL# - 21266.001.00

NARRATIVE DESCRIPTION OF THE PROJECT

THIS PROJECT CONSISTS OF APPROXIMATELY 2,000 LINEAR FEET OF A 10' WIDE SHARED USE PATH ALONG THE SOUTH SIDE OF NORTH BEAUREGARD STREET BETWEEN FILLMORE AVENUE AND BERKELEY STREET. THIS TRAIL IS DESIGNED TO BE LEVEL I PERMEABLE PAVEMENT AND WILL REQUIRE TWO RETAINING WALLS TO ACCOMMODATE THE EXPANDED WIDTH OF THE SHARED USE PATH.

#### NOTES:

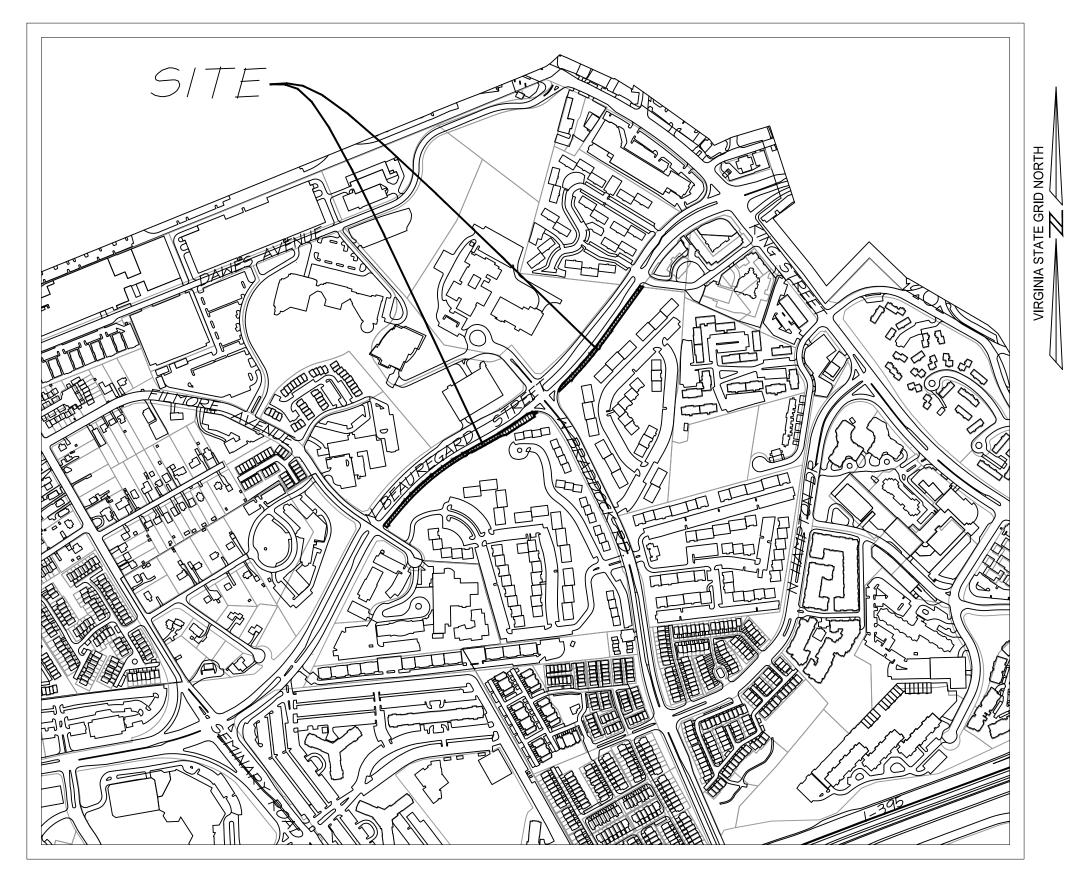
- I. THIS SITE IS LOCATED IN A RESOURCE PROTECTION AREA (RPA). A FIELD INVESTIGATION TO LOCATE THE EXTENTS OF THE RPA IS CURRENTLY IN PROGRESS AND THE PLAN WILL BE UPDATED WITH THE RESULTS OF THAT INVESTIGATION WITH THE NEXT SUBMISSION. THE RPA LINE IDENTIFIED ON THIS PLAN IS PROVIDED FROM GIS INFORMATION AND IS AN APPROXIMATE
- 2. THIS PROJECT CONTAINS STEEP SLOPES ALONG THE SOUTH SIDE OF THE PROJECT LIMITS.
- 3. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO AREAS ON-SITE CONTAINING CONTAMINATED SOILS OR CONTAMINATED GROUNDWATER.
- 4. IN ACCORDANCE WITH THE CITY OF ALEXANDRIA'S MARINE CLAY AREAS MAP DATED NOVEMBER 1976, THERE ARE NO AREAS OF MARINE CLAY LOCATED IN THE VICINITY OF THIS SITE.
- 5. THIS PROJECT IS NOT LOCATED WITHIN A COMBINED SEWER AREA.



PREPARED BY:

## christopher consultants

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LOCATION MAP SCALE 1"= 500'

OWNER/APPLICANT CITY OF ALEXANDRIA 301 KING STREET ALEXANDRIA, VA 22314 (703) 746-4045

GEOTECHNICAL ENGINEER 14155 SULLYFIELD CIRCLE SUITE H CHANTILLY, VA 20151 (703) 999-3207

CIVIL ENGINEER christopher consultants, Itd. 9900 MAIN STREET SUITE 400 FAIRFAX, VIRGINIA 22031 (703) 273-6820

> COST ESTIMATOR PROCON CONSULTING 1005 N. GLEBE SUITE 325 ARLINGTON, VA 22201 (703) 527-7059

ROW/EASEMENT ACQUISITION SPECIALIST ERM AND ASSOCIATES 49 CULPEPPER STREET WARRENTON, VA 20186 (540) 347-5547

SHEET INDEX

COVER SHEET CIOO-CIOI GENERAL NOTES C200 SITE DETAILS C300-C301 EXISTING CONDITIONS PLAN C302-C303 DEMOLITION PLAN C400-C401 CONCEPTUAL SITE PLAN C500-C501 CONCEPTUAL GRADING PLAN TYPICAL TRAIL SECTION CONCEPTUAL SIGNAGE PLAN PRE BMP MAP POST BMP MAP BMP WATER QUALITY C700-C701 CONCEPTUAL TRAFFIC CONTROL PLAN CONCEPTUAL EROSION \$ SEDIMENT CONTROL PLAN -

C900-C901 ROW AND EASEMENT EXHIBIT

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ENVIRONMENTAL ENGINEER WETLAND STUDIES AND SOLUTIONS, INC. DULLES GEOTECHNICAL 5300 WELLINGTON BRANCH DRIVE SUITE 100 GAINESVILLE, VIRGINIA 20155

(703) 679-5600

2. OWNER:

CITY OF ALEXANDRIA

3. APPLICANT:

CITY OF ALEXANDRIA,
DEPARTMENT OF PROJECT IMPLEMENTATION

- 4. THE TOPOGRAPHIC SURVEY SHOWN WAS RECEIVED FROM THE CITY OF ALEXANDRIA AND THE FIELD WORK WAS COMPLETED BETWEEN 4/4/20 TO 6/5/20. THE VERTICAL DATUM IS NAVD 88 (1' CONTOURS) AND THE HORIZONTAL DATUM IS NAD 83.
- 5. THE SITE CONTAINS SASSAFRAS-MARUMSCO COMPLEX AND URBAN LAND KINGSTOWNE COMPLEX PER THE USDA SOIL SURVEY. A GEOTECHNICAL REPORT WILL BE PROVIDED WITH SUBSEQUENT SUBMISSIONS.
- 6. THE SITE IS LOCATED IN THE FOUR MILE RUN (WEST) WATERSHED.
- 7. CONSTRUCTION PERMITS ARE REQUIRED FOR THIS PROJECT.
- 8. ALL NEW CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ALEXANDRIA AND TO THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) STANDARDS AND SPECIFICATIONS, AS APPLICABLE.
- 9. BUILDING HEIGHT SHALL NOT EXCEED THE ALLOWABLE LIMIT BY THE CITY OF ALEXANDRIA ZONING ORDINANCE OR AS APPROVED BY THE PLANNING COMMISSION AND THE CITY OF ALEXANDRIA COUNCIL.
- 10. PRIOR TO COMMENCING NEW WORK, THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING ADJACENT AREAS. IF CITY'S EXISTING PUBLIC INFRASTRUCTURE, INCLUDING BUT NOT LIMITED, TO STREETS, ALLEYWAYS, DRIVEWAY APRONS, SANITARY AND STORM SEWERS, STREET LIGHTING, TRAFFIC AND PEDESTRIAN SIGNALS, SIDEWALKS, CURB AND GUTTER, AND STORM WATER DROP INLET STRUCTURES ARE DAMAGED BY THE CONTRACTOR OR BY ACTIVITIES RELATING TO THE SITE CONSTRUCTION THEN THE APPLICANT SHALL REPAIR THE SAME TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES). A PRE-CONSTRUCTION WALK/SURVEY OF THE SITE SHALL OCCUR WITH CONSTRUCTION AND INSPECTION STAFF TO DOCUMENT EXISTING CONDITIONS PRIOR TO ANY LAND DISTURBING ACTIVITY.
- 11. ALL IMPROVEMENTS TO THE CITY'S RIGHT-OF-WAY SUCH AS CURB, GUTTER, SIDEWALK, AND DRIVEWAY APRONS, ETC., ARE DESIGNED PER THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS.
- 12. ALL STREET CUT AND PATCH WORK LOCATED IN PUBLIC RIGHT-OF-WAYS AND/OR PRIVATE PROPERTY, REQUIRED FOR ANY UTILITY INSTALLATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS AND TO THE SATISFACTION OF THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES) AND/OR PROPERTY OWNER.
- 13. ALL REQUIRED STATE AND FEDERAL PERMITS, WHICH COULD INCLUDE PERMITS FROM THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION (VDCR), VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (VDEQ), VIRGINIA DEPARTMENT OF HISTORIC RESOURCES (VDHR), UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA), ARMY CORPS OF ENGINEERS AND VIRGINIA MARINE RESOURCES, MUST BE IN PLACE FOR ALL CONSTRUCTION AND MITIGATION WORK PRIOR TO RELEASE OF THE GRADING PLAN. THIS INCLUDES THE STATE REQUIREMENT FOR A VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) GENERAL PERMIT FOR DISCHARGES OF STORMWATER FROM CONSTRUCTION ACTIVITIES FOR LAND DISTURBING ACTIVITIES GREATER THAN 2,500. INFORMATION REGARDING THE VSMP GENERAL PERMIT CAN BE FOUND ONLINE AT: http://www.dcr.virgina.gov/soil\_and\_water/vsmp.shtml.
- 14. PERMITS FROM THE CITY OF ALEXANDRIA OFFICE OF ENVIRONMENTAL QUALITY (OEQ) AND TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES) SHALL BE OBTAINED BY THE APPLICANT, AS REQUIRED AND DOCUMENTED HEREIN. THE CONTRACTOR CAN CONTACT ALEXANDRIA FIRE AND CODE ADMINISTRATION DEPARTMENT AT (703) 838-4644 OR (703)-746-4200 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION.
- 15. ANY WORK IN THE PUBLIC RIGHT OF WAY SHALL REQUIRE A SEPARATE PERMIT FROM THE DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES. THE CONTRACTOR CAN CONTACT THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES AT (703) 746-4035 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION.
- 23. TO THE BEST KNOWLEDGE OF THE ENGINEER, THERE ARE NO GRAVES OR BURIAL SITES FOUND ON THIS PROPERTY.
- 24. THE CONTRACTOR MUST ENSURE THAT POSITIVE DRAINAGE OCCURS ON SITE TO PREVENT PONDING OR DRAINAGE PROBLEMS ON ADJACENT PROPERTIES.
- 25. IN THE EVENT THE PROPOSED SITE GRADING ADVERSELY IMPACTS AND/OR CREATES A NUISANCE ON PUBLIC RIGHT OF WAY OR PRIVATE PROPERTIES THEN THE APPLICANT SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL IMPROVEMENTS TO SITE GRADING TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES.
- 26. THE EXISTING SIDEWALKS SHALL REMAIN OPEN DURING CONSTRUCTION OR PEDESTRIAN ACCESS SHALL BE MAINTAINED TO THE SATISFACTION OF THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES THROUGHOUT THE CONSTRUCTION OF THE PROJECT.
- 27. CONTRACTOR SHALL NOT CAUSE OR PERMIT VEHICLES TO IDLE FOR MORE THAN 10 MINUTES WHEN PARKED.
- 28. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- 29. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION, AS DETERMINED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, CITY OF ALEXANDRIA.
- 30. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH ALEXANDRIA NOISE CONTROL CODE TITLE II, CHAPTER 5, WHICH PERMITS CONSTRUCTION ACTIVITIES TO OCCUR BETWEEN THE FOLLOWING HOURS:
  - MONDAY THROUGH FRIDAY FROM 7:00 AM 6:00 PM SATURDAYS FROM 9:00 AM TO 6:00 PM NO CONSTRUCTION ACTIVITIES ARE PERMITTED ON SUNDAYS

#### SITE ASSESSMENT:

- THERE ARE NO TIDAL WETLANDS, SHORES, TRIBUTARY STREAMS, FLOODPLAINS, CONNECTED WETLANDS, ISOLATED WETLANDS, HIGHLY ERODIBLE/PERMEABLE SOILS OR BUFFER AREAS ASSOCIATED WITH SHORES, STREAMS OR WETLANDS LOCATED ON THIS SITE. THERE ARE NO WETLANDS PERMITS REQUIRED FOR THIS DEVELOPMENT PROJECT. THIS PROJECT IS LOCATED IN A RPA AND HAS STEEP SLOPES.
- 2. THIS PROJECT IS NOT LOCATED WITHIN A 100-YR FLOOD PLAIN.
- 3. THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, DIVISION OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED IF UNUSUAL OR UNANTICIPATED CONTAMINATION OR UNDERGROUND STORAGE TANKS, DRUMS AND CONTAINERS ARE ENCOUNTERED AT THE SITE. IF THERE IS ANY DOUBT ABOUT PUBLIC SAFETY OR A RELEASE TO THE ENVIRONMENT, THE ALEXANDRIA FIRE DEPARTMENT MUST BE CONTACTED IMMEDIATELY BY CALLING 911. THE TANK OR CONTAINER'S REMOVAL, ITS CONTENTS, AND SOIL CONTAMINATION AND RELEASES TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE AND CITY REGULATIONS.
- 4. IF REQUIRED, ALL WELLS TO BE DEMOLISHED ON THIS PROJECT, INCLUDING MONITORING WELLS, MUST BE CLOSED IN ACCORDANCE WITH STATE WELL REGULATION. CONTACT THE ALEXANDRIA HEALTH DEPARTMENT AT 703-746-4996.

#### MISS UTILITY NOTES:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF, DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE LOCATIONS SHOWN ON THE PLANS, HE/SHE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND PROPERTY OWNERS AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.
- 2. THE DEPTHS AND LOCATIONS OF ANY UNDERGROUND ELECTRIC, WATER, TELEPHONE, GAS MAINS OR OTHER UTILITIES THAT CANNOT BE FIELD SURVEYED, CALL MISS UTILITY (1-800-257-7777) 48 HOURS PRIOR TO EXCAVATING TO LOCATE THE UNDERGROUND UTILITIES.

#### **ARCHAEOLOGY NOTES:**

- 1. THE FINAL SITE PLAN, GRADING PLAN, OR ANY OTHER PERMITS INVOLVING GROUND-DISTURBING ACTIVITIES (SUCH AS CORING, GRADING, FILLING, VEGETATION REMOVAL, UNDERGROUNDING UTILITIES, PILE DRIVING, LANDSCAPING AND OTHER EXCAVATIONS AS DEFINED IN SECTION 2-151 OF THE ZONING ORDINANCE) SHALL NOT BE RELEASED UNTIL THE CITY ARCHAEOLOGIST CONFIRMS THAT ALL ARCHAEOLOGICAL FIELD WORK HAS BEEN COMPLETED OR THAT AN APPROVED RESOURCE MANAGEMENT PLAN IS IN PLACE TO RECOVER SIGNIFICANT RESOURCES IN CONCERT WITH CONSTRUCTION ACTIVITIES. TO CONFIRM, CALL ALEXANDRIA ARCHAEOLOGY AT (703) 746-4399.
- 2. CALL ALEXANDRIA ARCHAEOLOGY (703-746-4399) TWO WEEKS BEFORE THE STARTING DATE OF ANY GROUND DISTURBANCE SO THAT AN INSPECTION OR
- 3. THE APPLICANT / DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS

MONITORING SCHEDULE FOR THE CITY ARCHAEOLOGISTS CAN BE ARRANGED.

4. THE APPLICANT / DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION AND/OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAYS.

#### RODENT ABATEMENT NOTE:

1. PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT, A RODENT ABATEMENT PLAN SHALL BE SUBMITTED TO THE CITY OF ALEXANDRIA DEPARTMENT OF CODE ADMINISTRATION THAT WILL OUTLINE STEPS WHAT STEPS HAVE AND WILL BE TAKEN TO PREVENT THE SPREAD OF RODENTS FROM THE CONSTRUCTION SITE TO THE SURROUNDING COMMUNITY AND SEWERS. THE CONTRACTOR CAN CONTACT ALEXANDRIA DEPARTMENT OF CODE ADMINISTRATION AT (703) 746-4200 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION. PLEASE BE ADVISED ONCE ANY DEMOLITION HAS BEEN COMPLETED ANY ABOVE GRADE BAIT BOXES MUST BE RELOCATED TO WITHIN 50 FEET OF A STRUCTURE IN KEEPING EPA REGULATIONS. IF THIS IS NOT POSSIBLE, THEY SHALL BE REMOVED AND REGULAR INSPECTIONS OF THE SITE CONDUCTED BY A VIRGINIA LICENSED PEST EXTERMINATOR TO ENSURE THE SITE REMAINS RODENT FREE.

#### **MOSQUITO CONTROL NOTES:**

- 1. SINCE STORM WATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICE (BMP) SYSTEMS THAT HOLD WATER FOR MORE THAN 5 DAYS BETWEEN THE MONTHS OF MAY AND OCTOBER HAVE THE POTENTIAL TO CAUSE MOSQUITO BREEDING HABITATS; THEREFORE, SUCH BMPS SHALL BE TREATED WITH A REGISTERED MOSQUITO LARVAL CONTROL PRODUCT. ALL LABELS SHOULD BE FOLLOWED FOR APPLICATION RATES AND AMOUNTS.
- 2. SINCE EXCESSIVE VEGETATION IN EXISTING BMPS ALSO INCREASES THE POTENTIAL FOR MOSQUITO PROBLEMS; THEREFORE VEGETATION SHALL BE CONTROLLED AND CUT TO REDUCE MOSQUITO BREEDING.
- 3. CONTACT THE CITY OF ALEXANDRIA ENVIRONMENTAL HEALTH VECTOR BORNE ILLNESS PROGRAM (703-838-4910) FOR QUESTIONS OR TREATMENT ASSISTANCE.

#### **UTILITY NOTES:**

- 1. SANITARY AND STORM SEWERS ARE MAINTAINED BY THE CITY OF ALEXANDRIA
- 2. WATER LINES ARE MAINTAINED BY VIRGINIA AMERICAN WATER (VAW). ALL EXISTING WATER LINES ARE SHOWN WITH AN ASSUMED DEPTH OF COVER OF 3.5' PER VAW REQUIREMENTS, HOWEVER, TEST PITS WILL BE REQUIRED IN ORDER TO DETERMINE THE ACTUAL DEPTH
- 3. GAS LINES ARE OWNED AND MAINTAINED BY WASHINGTON GAS.
- 4. ELECTRIC LINES ARE OWNED AND MAINTAINED BY DOMINION VIRGINIA POWER.
- 5. CABLE LINES ARE OWNED AND MAINTAINED BY COMCAST.
- 6. TELEPHONE LINES ARE OWNED AND MAINTAINED BY VERIZON.
- 7. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME. ALL EXCAVATED MATERIAL TO BE REPLACED INTO THE TRENCH SHALL BE STOCKPILED ON THE HIGH SIDE OF THE TRENCH. IF ANY TRENCH WORK WILL REMAIN OPEN AFTER THE END OF THE WORKDAY ALL NEEDED EROSION AND SEDIMENT CONTROLS SHALL BE EMPLOYED. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION AND AS DETERMINED BY THE CITY OF ALEXANDRIA.

#### CONSTRUCTION NOTES:

- 1. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH MAY OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY ACTION AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUATION OF SERVICE.
- 2. THE CONTRACTOR SHALL DIG TEST PITS AS REQUIRED FOLLOWING NOTIFICATION AND MARKING OF ALL EXISTING UTILITIES TO VERIFY THE LOCATION AND DEPTH OF EXISTING UTILITIES. TEST HOLES TO BE PERFORMED AT LEAST 30 DAYS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE OWNER AND ENGINEER. REDESIGN AND APPROVAL BY REVIEWING AGENCIES SHALL BE OBTAINED. IF REQUIRED.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER AND THE ENGINEER OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM ANY AUTHORITY ISSUING PERMITS.
- 4. THE CONTRACTOR SHALL VISIT THE SITE AND SHALL VERIFY EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION.
- 5. THE CONTRACTOR SHALL CLEAN THE SITE OF ALL TREES, BUILDINGS, FOUNDATIONS, ETC. WITHIN THE LIMITS OF CONSTRUCTION UNLESS OTHERWISE SPECIFIED, AND SHALL BE RESPONSIBLE FOR ENSURING THAT EXISTING UTILITIES ARE DISCONNECTED.
- 6. THE DEVELOPER SHALL PROVIDE OVER-LOT GRADING TO PROVIDE POSITIVE DRAINAGE AND PRECLUDE PONDING OF WATER.
- 7. ALL AREAS, ON OR OFF-SITE, WHICH ARE DISTURBED BY THIS CONSTRUCTION AND WHICH ARE NOT PAVED OR BUILT UPON, SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION. THE MINIMUM ACCEPTABLE STABILIZATION SHALL CONSIST OF PERMANENT GRASS, SEED MIXTURE TO BE RECOMMENDED BY THE CITY AGENT. ALL SLOPES 3:1 AND GREATER SHALL BE SODDED AND PEGGED OF OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY OF ALEXANDRIA.
- 8. EXISTING SEPTIC FIELDS, IF APPLICABLE, SHALL BE ABANDONED IN ACCORDANCE WITH VIRGINIA HEALTH DEPARTMENT STANDARDS AND SPECIFICATIONS.
- ALL ABOVE GROUND UTILITIES SERVING THE SITE SHALL BE RELOCATED AS REQUIRED BY THE OWNING UTILITY COMPANIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL ARRANGEMENTS AND COORDINATING ALL WORK REQUIRED FOR THE NECESSARY RELOCATIONS
- 10. PRIOR TO BEGINNING OF CONSTRUCTION, CONTRACTOR SHALL VERIFY FROM THE ARCHITECTURAL DRAWINGS ALL DIMENSIONS, DETAILS AND TREATMENTS FOR THE PROPOSED BUILDINGS, WALKWAYS AND OTHER PROPOSED CONSTRUCTION WHERE INDICATED ON THE PLANS.
- 11. THE CONTRACTOR IS TO VERIFY INVERT, SIZE AND LOCATION OF BUILDING UTILITY CONNECTIONS WITH THE MECHANICAL PLANS PRIOR TO PLACEMENT OF UNDERGROUND UTILITIES.
- 12. EXISTING BUILDINGS, FENCES AND OTHER EXISTING PHYSICAL FEATURES ARE TO BE REMOVED AS REQUIRED BY THE CONTRACTOR.
- 13. EXISTING CONSTRUCTION SHALL BE REMOVED TO NEAREST JOINT. NEW CONSTRUCTION SHALL BE PROVIDED AS SHOWN AND ANY DAMAGED AREA SHALL BE REPAIRED TO MATCH CONDITIONS EXISTING PRIOR TO CONSTRUCTION OR TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES.
- 14. ALL PRIVATE BUILDING CONNECTIONS ARE TO BE INSTALLED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
- 15. TOPS OF EXISTING STRUCTURES WHICH REMAIN IN USE ARE TO BE ADJUSTED IN ACCORDANCE WITH THE GRADING PLAN. ALL PROPOSED STRUCTURE TOP ELEVATIONS ARE TO BE VERIFIED BY THE CONTRACTOR WITH THE SITE GRADING PLANS. IN CASE OF CONFLICT, THE GRADING PLAN SHALL SUPERSEDE PROFILE ELEVATIONS. MINOR ADJUSTMENTS TO MEET FINISHED GRADE ELEVATIONS, IF REQUIRED, SHALL BE MADE IN THE FIELD WITH APPROVAL OF SITE INSPECTOR OF THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES.
- 16. THE DESIGN, CONSTRUCTION, FIELD PRACTICES AND METHODS SHALL CONFORM TO THE REQUIREMENTS SET FORTH BY THE CITY OF ALEXANDRIA ZONING ORDINANCE AND DESIGN AND CONSTRUCTION STANDARDS MANUAL. FAILURE TO COMPLY WITH THE CODE, APPLICABLE MANUALS, AND PROVISIONS OF THE CONSTRUCTION AND ESCROW AGREEMENTS OR PERMITS SHALL BE DEEMED A VIOLATION.
- 17. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE OWNER/DEVELOPER OR HIS AGENT OF ANY LEGAL RESPONSIBILITIES WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA OR ANY ORDINANCE ENACTED BY THE CITY OF ALEXANDRIA.
- 18. CONSTRUCTION STAKEOUT SHALL BE UNDER THE DIRECT SUPERVISION OF A LICENSED LAND SURVEYOR IN THE COMMONWEALTH OF VIRGINIA
- 9. THE CONTRACTOR IS REFERRED TO STRUCTURAL, GEOTECHNICAL, MECHANICAL AND ARCHITECTURAL PLANS FOR FOUNDATION TREATMENT INCLUDING, BUT NOT LIMITED TO, SHEETING AND SHORING FOR BUILDING EXCAVATION, WATERPROOFING FOR FILL AGAINST BUILDINGS, LOCATION OF MECHANICAL EQUIPMENT, AND CONNECTIONS AT THE FACES OF BUILDINGS.
- 20. SMOOTH GRADE SHALL BE MAINTAINED FROM THE CENTERLINE OF THE EXISTING ROAD TO THE PROPOSED ENTRANCE AND/OR CURB & GUTTER TO PRECLUDE THE FORMING OF FALSE GUTTER AND/OR PONDING OF WATER ON THE ROADWAY.
- 21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING A SMOOTH TRANSITION TO EXISTING CURB AND SIDEWALKS, IF APPLICABLE.
- 22. THE CALIFORNIA BEARING RATIO (CBR) VALUES OF IN-SITU MATERIALS SHALL BE DETERMINED BY FIELD AND/OR LABORATORY TESTS FOR ACTUAL DETERMINATION OF REQUIRED THICKNESSES OF SURFACE, BASE, SUB-BASE, AND SUB GRADE MATERIALS. THE CONTRACTOR WILL REVISE THE PAVEMENT DESIGN BASED ON THE FIELD DETERMINED CBR. THE PAVEMENT SECTION SHALL BE DESIGNED BY A GEOTECHNICAL /LICENSED PROFESSIONAL ENGINEER TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES FOR ALL PAVEMENTS INCLUDING EMERGENCY VEHICLE EASEMENT (EVE) TO SUPPORT H-20 LOADING. IN THE CASE OF PAVEMENT PATCHES, PAVEMENT SECTION MUST MEET OR EXCEED EXISTING SECTION.
- 23. THE THICKNESSES OF SUB-BASE, BASE, AND WEARING COURSE SHALL BE DESIGNED USING "CALIFORNIA METHOD" AS SET FORTH ON PAGE 3-76 OF THE SECOND EDITION OF A BOOK ENTITLED, "DATA BOOK FOR CIVIL ENGINEERS, VOLUME ONE, DESIGN" WRITTEN BY ELWYN E. SEELYE. AN ALTERNATE PAVEMENT SECTION DESIGNED TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES FOR ALL PAVEMENTS INCLUDING EMERGENCY VEHICLE EASEMENT (EVE) TO SUPPORT H-20 LOADING BASED ON CBR AND VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) METHOD (VASWANI METHOD) AND STANDARD MATERIAL SPECIFICATIONS SHALL BE ACCEPTABLE.
- 24. EMERGENCY VEHICLE EASEMENTS (EVE) AND AMERICAN WITH DISABILITY (ADA) ACCESSIBLE PARKING SPACES MUST BE DELINEATED WITH PAVEMENT MARKINGS PER THE CITY OF ALEXANDRIA STANDARD SIGNAGE AND AMERICAN WITH DISABILITIES (ADA) REQUIREMENTS.
- 25. ALL STRIPING SHALL MEET THE REQUIREMENTS OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS (LATEST EDITION) AND SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
- 26. ALL EARTHWORK OPERATIONS ARE TO BE PERFORMED UNDER THE FULL TIME, ON-SITE SUPERVISION OF A REGISTERED GEOTECHNICAL ENGINEER WITH GEOTECHNICAL TESTING IN ACCORDANCE WITH CONSTRUCTION SPECIFICATIONS AND GEOTECHNICAL REPORT REQUIREMENTS.
- 27. THE CONTRACTORS SHALL NOT CAUSE OR PERMIT VEHICLES TO IDLE FOR MORE THAN 10 MINUTES WHEN PARKED.
- 28. UNLESS OTHERWISE APPROVED THE CONTRACTOR SHALL PROVIDE THERMOPLASTIC LADDER STYLE/STANDARD PEDESTRIAN CROSS WALKS AT ALL CROSSINGS AT THE PROPOSED DEVELOPMENT, WHICH MUST BE DESIGNED TO THE SATISFACTION OF THE DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES. THE DESIGN OF LADDER STYLE OR STANDARD PEDESTRIAN CROSS WALK SHALL BE EVALUATED ON A CASE BY CASE BASIS AND SHALL COMPLY WITH THE REQUIREMENTS OF POLICY MANUAL SECTION 30.18, PEDESTRIAN CROSSWALKS, JULY 13, 2006. A COPY OF THE POLICY MANUAL CAN BE OBTAINED FROM YON LAMBERT, BICYCLE AND PEDESTRIAN COORDINATOR/TRANSPORTATION PLANNER, TELEPHONE (703) 746-4081.
- 29. THE APPLICANT SHALL WORK WITH THE CITY FOR RECYCLING AND/OR REUSE OF THE EXISTING BUILDING MATERIALS AS PART OF THE DEMOLITION PROCESS, INCLUDING LEFTOVER, UNUSED, AND/OR DISCARDED BUILDING MATERIAL.
- 30. APPLICANT/CONTRACTOR SHALL IMPLEMENT A WASTE AND REFUSE CONTROL PROGRAM DURING THE CONSTRUCTION PHASE OF THIS DEVELOPMENT. THIS PROGRAM SHALL CONTROL WASTES SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER OR TRASH, TRASH GENERATED BY CONSTRUCTION WORKER OR MOBILE FOOD VENDOR BUSINESSES SERVING THEM, AND ALL SANITARY WASTE AT THE CONSTRUCTION SITE AND PREVENT OFFSITE MIGRATION THAT MAY CAUSE ADVERSE IMPACTS TO NEIGHBORING PROPERTIES OR TO THE ENVIRONMENT TO THE SATISFACTION OF DIRECTORS OF T&ES AND CODE ADMINISTRATION. ALL WASTES SHALL BE PROPERLY DISPOSED OFFSITE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS.

#### ABBREVIATIONS

<u>ABBRE</u>	<u>VIATIONS</u>				
&	AND	FD	F FLOOR DRAIN	I Q	Q FLOW RATE
	ANGLE AT	FDC	FLOOR DRAIN FIRE DEPARTMENT	QTY	QUANTITY
@ &	CENTER LINE	FF	CONNECTION		R
ø	DIAMETER	FF   FH	FINISH FLOOR FIRE HYDRANT	R	RISER
Δ ዊ	DELTA PROPERTY LINE	FL	FLOW LINE	RAD R/W	RADIUS
W/	WITH	FM	FORCE MAIN	R/W RCN	RIGHT OF WAY RUNOFF CURVE NUMBER
		FDN FO	FOUNDATION FIBER OPTIC	RCP	REINFORCED CONCRETE PIPE
AASHTO	AMERICAN ASSOCIATION	FOC	FACE OF CURB	RD	ROOF DRAIN
	OF STATE HIGHWAY AND TRANSPORTATION	FP   FT	FLOOD PLAIN FEET/FOOT	REINF	REINFORCED/REINFORCING
AC	OFFICIALS ACRE			REQD REV	REQUIRED
AC-FT	ACRE-FEET	G G	G GAS	RPA	REVISION RESOURCE PROTECTION
AD ADJ	AREA DRAIN ADJACENT	GA GA	GAUGE	RR	AREA RAILROAD
AGGR	AGGREGATE	GAL	GALLON	RT	RIGHT
ANSI	AMERICAN NATIONAL	GALV GFA	GALVANIZED GROSS FLOOR AREA	RTE	ROUTE
ARCH	STANDARDS INSTITUTE ARCHITECTURAL	GIS	GEOGRAPHICAL		S
ASPH	ASPHALT	   GM	INFOORMATION SYSTEM GAS METER	SAN	SANITARY
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	GPM	GALLONS PER MINUTE	SCH SDF	SCHEDULE SPILLWAY DESIGN FLOOD
AVG	AVERAGE	GR GV	GUARD RAIL GAS VALVE	SEC	SECTION
AWWA	AMERICAN WATER WORKS	GW	GUY WIRE	SEW	SEWER
	ASSOCIATION	l ——	Н	SIM SPEC	SIMILAR SPECIFICATION
DE	B BASEMENT ELOOP	нс	HANDICAP COMPLIANT	SQ	SQUARE
BF BLDG	BASEMENT FLOOR BUILDING	HB HDPE	HORIZONTAL BEND HIGH DENSITY	SS	SANITARY SEWER
BM	BENCHMARK		POLY ETHYLENE	STA STD	STATION STANDARD
ВОС	BACK OF CURB	HGL	HYDRAULIC GRADE LINE	STM	STORM
BOV	BLOW OF VALVE	HORZ HP	HORIZONTAL HIGH POINT	SVC S/W	SERVICE SIDEWALK
BSMT BW	BASEMENT BOTTOM OF WALL	HR	HOUR	S/W SWM	STORM WATER
D 4 A		HR	HANDRAIL	l ——	MANAGEMENT
	C	HT HW	HEIGHT HEADWATER	<del></del>	T TREAD
C/O C	CLEAN OUT RUNOFF COEFFICIENT			TBR	TO BE REMOVED
C&G	CURB AND GUTTER	l <del></del>	DAINEALL INTENCITY	TBRL	TO BE RELOCATED
СВ	CATCH BASIN	l iD	RAINFALL INTENSITY INSIDE DIAMETER	TELE TEMP	TELEPHONE TEMPORARY
CBR C-C	CALIFORNIA BEARING RATIO CENTER TO CENTER	IN	INCH	TH	TEST HOLE
CF	CUBIC FOOT	INV	INVERT	THR	THROAT
CFS	CUBIC FEET PER SECOND	IP IPF	IRON PIPE IRON PIPE FOUND	TOB TOC	TOP OF BANK TOP OF CURB
CIP	CAST-IN-PLACE	IPS	IRON PIPE SET	TP	TEST PIT
CIR CJ	CIRCLE CONTROL JOINT		J	TS	TOP OF STAIRS
CLR	CLEAR	JB	JUNCTION BOX	TW TYP	TOP OF WALL TYPICAL
CMU	CONCRETE MASONRY UNIT	JT	JOINT	<del></del>	
CO COL	CLEAN OUT COLUMN	<del></del>	K		U
CONT	CONTINUOUS OR CONTINUE	Ke	CULVERT ENTRANCE LOSS COEFFICIENT	UD UG	UNDERDRAIN UNDERGROUND
CONC	CONCRETE			UGC	UNDERGROUND CABLE
CONST	CONSTRUCTION	<del></del>	LENGTH	UGE	UNDERGROUND ELECTRIC
CONTR	CONTRACTOR	LAT	LATERAL	UGT	UNDERGROUND TELEPHONE
CORR CY	CORRUGATED CUBIC YARD	LL LP	LOWER LEVEL LOW POINT	UNO UP	UNLESS NOTED OTHERWISE UTILITY POLE
	D	LT	LEFT	USGS	UNITED STATES
	DEPTH				GEOLOGICAL SURVEY
DA	DRAINAGE AREA	M.E.	MATCH EXISTING		V
DEMO	DEMOLITION	MAX	MAXIMUM	VB	VERTICAL BEND
DEPT	DEPARTMENT	MECH	MECHANICAL MANUFACTURER	VC	VERTICAL CURVE
DI DIM	DROP INLET / DUCTILE IRON DIMENSION	MFR MIN	MINIMUM	VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
OIP	DUCTILE IRON PIPE	міѕс	MISCELLANEOUS	VEL	VELOCITY
DIST	DISTANCE	MON MPH	MONUMENT MILE PER HOUR	VERT	VERTICAL
DOM DN	DOMESTIC DOWN	MSL	MEAN SEA LEVEL	VIF VSMP	VERIFY IN FIELD VIRGINIA STORMWATER
DS	DOWN SPOUT	MW	MONITORING WELL		MANAGEMENT PROGRAM
OTL	DETAIL		N	VOL	VOLUME
OWG	DRAWING	N/A	NOT APPLICABLE		W
	E	NFA	NET FLOOR AREA	l W WL	WIDE/WIDTH WATER LINE
Ξ/W	EACH WAY	NO.	NUMBER NOMINAL	WM	WATER METER
=/ <b>v v</b> =A	EACH	NOM.	NOMINAL	WV	WATER VALVE
EC	EROSION CONTROL	oc oc	ON CENTER	WWF WWM	WELDED WIRE FABRIC WELDED WIRE MESH
EG EGI	EDGE OF GRAVEL ENERGY GRADE LINE	OD	ON CENTER OUTSIDE DIAMETER		X
EGL ELEC	ELECTRIC	O/H	OVERHEAD	XING	CROSSING
ELEV	ELEVATION	OHC	OVERHEAD CABLE		Y
ENGR	ENGINEER	OHE OHT	OVERHEAD ELECTRIC OVERHEAD TELEPHONE	YD	YARD
EOC EOP	EDGE OF CONCRETE EDGE OF PAVEMENT			YI	YARD INLET
ES	END SECTION	<u> </u>	P	YR	YEAR
ESMT	EASEMENT	P PC	PERIMETER POINT OF CURVATURE	<del>-</del>	Z SIDE SI ODES
EQ EW	EQUAL END WALL	PCC	POINT OF COMPOUND	Z ZO	SIDE SLOPES ZONING ORDINANCE
ΞX	EXISTING	PERF	CURVATURE PERFORATED		
EXP	EXPANSION	PI	POINT OF INTERSECTION		
		PIP PPF	POURED IN PLACE PINCHED PIPE FOUND		
		PRC	POINT OF REVERSE		
		PROP	CURVATURE PROPOSED		
		PSI	POUNDS PER SQUARE INCH		
		PVC PVMT	POLYVINYL CHLORIDE PAVEMENT		
		]			
		1			

**hristopher** consultants





ELI GOLDMAN Lic. No.55868 10/21/2021

N DORN & BEAUREGAR ICILITY & SHARED USE CONCEPT PLAN - 30%

10/21/2021 30% SUBMISSION

SCALE: NONE
DESIGN: EG
DRAWN: JS
CHECKED: AG
SHEET TITLE:

PROJECT No.: 21266.001.00

DRAWING No.: 111028

DATE: 10/01/21

GENERAL NOTES

OUEET N

#### **DEMOLITION NOTES**:

- 1. A SEPARATE PERMIT IS REQUIRED FOR DEMOLITION; HOWEVER, NO DEMOLITION SHALL BEGIN UNTIL ALL EROSION AND SEDIMENT AND TREE PROTECTION CONTROLS ARE IN PLACE AND ARE APPROVED BY AN EROSION AND SEDIMENT CONTROL INSPECTOR OF THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES.
- 2. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE MOST CURRENT APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS, INCLUDING BUT NOT LIMITED TO, ENVIRONMENTAL PROTECTION AGENCY (EPA), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), VIRGINIA OCCUPATIONAL AND SAFETY HEALTH COMPLIANCE PROGRAM (VOSH ENFORCEMENT), VIRGINIA OVERHEAD HIGH VOLTAGE LINE SAFETY ACT, NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS), AND NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH (NIOSH).
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK WITH REPRESENTATIVE UTILITY COMPANIES AND FOR THE IMPLEMENTATION OF REQUIRED UTILITY-RELATED WORK.
- 4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE UPON ENCOUNTERING ANY HAZARDOUS MATERIALS DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL DOCUMENT SAME TO THE OWNER'S REPRESENTATIVE AND OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
- DISCONNECTION OF SERVICES AND SYSTEMS SUPPLYING UTILITIES TO BE ABANDONED OR DEMOLISHED SHALL BE COMPLETED PRIOR TO OTHER SITE DEMOLITION IN FULL COMPLIANCE WITH APPLICABLE CODES, REGULATIONS AND THE REQUIREMENTS OF UTILITY PURVEYORS HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE UTILITY PURVEYORS, PAYMENT OF ASSOCIATED FEES AND PROCUREMENT OF ALL NECESSARY PERMITS.
- 6. PRIOR TO REMOVAL OF MATERIALS OVER EXISTING UTILITY SYSTEMS, THE CONTRACTOR SHALL DOCUMENT EXISTING CONDITIONS AND, IF AT VARIANCE WITH CONDITIONS AS REPRESENTED ON THE PLANS, NOTIFY THE OWNER'S REPRESENTATIVE AND OBTAIN DIRECTIONS AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
- 7. THE CONTRACTOR SHALL BACKFILL EXCAVATED AREAS WITH APPROVED MATERIALS/CLEAN FILL AS PER THE REQUIREMENTS OF VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT).
- 8. THE CONTRACTOR SHALL PROTECT AND PREVENT DAMAGE TO EXISTING ON-SITE UTILITY DISTRIBUTION FACILITIES THAT ARE TO REMAIN. ACTIVE UTILITY DISTRIBUTION FACILITIES ENCOUNTERED DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES SHALL BE SHUT OFF AT THE SERVICE MAIN WITH THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
- 9. DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE UPON ENCOUNTERING ANY EXISTING UTILITIES AND/OR UTILITY SYSTEM STRUCTURES NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL DOCUMENT THE SAME AND FORWARD THE INFORMATION TO THE RESIDENT ENGINEER/OWNER'S REPRESENTATIVE, AND OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
- 10. THE CONTRACTOR OR APPLICANT SHALL WORK WITH THE CITY STAFF TO REUSE THE EXISTING, LEFTOVER, UNUSED AND/OR DISCARDED BUILDING MATERIALS AS PART OF THE DEMOLITION PROCESS OR THE CONSTRUCTION DEBRIS MUST BE REMOVED TO AN APPROVED LANDFILL WITH ADEQUATE FREQUENCY IN ACCORDANCE WITH THE VIRGINIA STATE LITTER CONTROL ACT.

#### UTILITY WORKS NOTES:

UNDERGROND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING MINIMUM STANDARDS DESCRIBED IN SECTION 4VAC50-30-40 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) AND ADDITIONAL APPLICABLE PRACTICES FOLLOWED BY THE CITY OF ALEXANDRIA:

- A. ALL PRIVATE UTILITIES SHALL BE LOCATED OUTSIDE OF THE PUBLIC RIGHT OF WAY AND PUBLIC UTILITY EASEMENTS UNLESS THE UTILITY OWNERS HAVE FRANCHISE AGREEMENT WITH THE CITY OF ALEXANDRIA; HOWEVER, NO ELECTRIC TRANSFORMERS AND SWITCH GEARS/CONTROL BOXES SHALL BE PLACED IN THE PUBLIC RIGHT OF WAY.
- B. ALL THE EXISTING AND PROPOSED PUBLIC AND PRIVATE UTILITIES AND EASEMENTS SHALL BE SHOWN AND A DESCRIPTIVE NARRATION OF VARIOUS UTILITIES SHALL BE PROVIDED ON THE PLAN.
- C. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN UTILITY SERVICES AT

D. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.

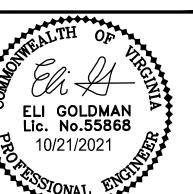
- ALL TIMES DURING CONNECTION AND/OR CONSTRUCTION.
- E. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- F. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
- G. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ACCORDANCE WITH THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
- H. SHOULD UTILITY CONSTRUCTION BE PERFORMED AFTER COMPLETING EARTHWORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACHIEVING 98 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1551) COMPACTION IN ALL TRENCH BACKFILL.
- I. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE VIRGINIA REGULATIONS 4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS, VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH).
- J. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- K. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION, AS DETERMINED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, CITY OF ALEXANDRIA.
- L. A REMEDIATION PLAN SHALL BE SUBMITTED DETAILING HOW CONTAMINATED SOILS AND/OR GROUNDWATER WILL BE DEALT WITH, INCLUDING PLANS TO REMEDIATE UTILITY CORRIDORS.
- M. UTILITY CORRIDORS IN CONTAMINATED SOIL SHALL BE OVER EXCAVATED BY 2 FEET AND BACKFILLED WITH CLEAN SOIL.
- N. GRADING CAN BE PERFORMED ON INSTALLATION OF UTILITIES.
- O. ALL NEW INSTALLATIONS AND/OR REINSTALLATION OF UTILITIES SUCH AS ELECTRICAL LINES, GAS PIPES, COMMUNICATION CABLES INCLUDING WATER AND SEWER LATERALS BOTH ON PRIVATE PROPERTY AND IN THE PUBLIC RIGHT OF WAY IN THE CITY OF ALEXANDRIA SHALL BE PROVIDED WITH 3" AND 6" WIDE MIL OVERALL THICKNESS DETECTABLE UNDERGROUND WARNING TAPES (DUWT). THE 3" DUWT SHALL BE INSTALLED AT DEPTHS OF 12" TO 18" AND 6" WIDE AT A DEPTH OF 24" SO AS TO MAKE UNDERGROUND INSTALLATIONS EASY TO FIND USING A NON-FERROUS LOCATOR. THE DUWT SHALL BE WITH ALUMINUM BACKING OR SOLID ALUMINUM CORE LAMINATED WITH A PROTECTIVE CLEAR FILM ON BOTH SIDES, SEALING AND PROTECTING THE GRAPHICS FROM UNDERGROUND MOISTURE, ACIDS, ALKALIS, AND OTHER SOIL SUBSTANCES. ALL DUWT TAPES SHALL BE PRINTED IN BLACK INK ON AMERICAN PUBLIC WORKS ASSOCIATION (APWA) APPROVED COLORS TO MEET OR EXCEED INDUSTRY STANDARDS. THE FOLLOWING ARE THE APWA COLOR

RED	CAUTION BURIED ELECTRIC POWER LINES, CABLES, CONDUITS, AND LIGHTING CABLES
YELLOW	CAUTION GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
ORANGE	CAUTION COMMUNICATIONS, ALARM OR SIGNAL LINES, CABLES OR CONDUITS
BLUE	CAUTION POTABLE WATER
PURPLE	CAUTION RECLAIMED WATER, IRRIGATION AND SLURRY LINES
GREEN	CAUTION SEWER, DRAIN LINES AND FORCE MAIN

**phe** ants

hristoph Onsultants main st p 703 : 400 x, va 22031





AN DORN & BEAUREGARD BIKE
ACILITY & SHARED USE PATH
CONCEPT PLAN - 30%

					NOIL
					DESCRIPTION
					DATE
1					MARK DATE

PROJECT No.: 21266.001.00 DRAWING No.: 111028 DATE: 10/01/21 SCALE: NONE DESIGN: EG DRAWN: JS CHECKED: AG

SHEET TITLE:

**GENERAL NOTES** 

OUEET N

## LIGHTING | STREET POLE

with tree vegetation or plantings.

Light poles shall be located so as not to be in conflict

Lights shall be located a minimum of 3 feet clear

from the edge of all shared-use paths or pedestrian

Top of light pole foundations shall be flush to finished

grade. Top of footing shall be sloped to shed water.

Connections installed beneath paving shall be

sleeved. Install ground fault protection at each pole.

Installation work shall be performed in conformity

Lights shall have photocell and time clock activation.

A 5 year minimum warranty is required on street

Lights are anticipated to require replacement after

A 3 year minimum warranty is required on poles.

Lights shall be installed on a GFCI circuit.

Life Cycle Expectations

20 years of normal and ordinary use.

pole light fixtures.

Fiberglass fluted base

#### Purpose

The street pole light shall be used to illuminate portions of the park system, including streets, park roads and trails.

#### General Information

Light fixtures shall be installed as a street or park road light in areas not guided by historic light fixture requirements or small area plan requirements. Lighting in Public Open Space zoned properties

requires a Special Use Permit.

#### The standard light fixture is Hadco, Inc., R53, or City approved equal.

Materials and Finish The globe/post top shall be Type V, clear stabilized acrylic with a Victorian style roof.

The pole and fixture shall be finished with a black UV-resistant catalyzed urethane coating.

Lights shall be mounted on fiberglass, fluted and tapered decorative poles for post top lights.

Light poles/fixtures/luminaires shall be 14 feet total height from finished grade and installed with an anchor base.

The ornamental base cover shall be designed to cover the anchor bolts in one or two pieces, be vandal resistant and finished to match the post.

#### Lamps shall be LED.

#### Features

Light fixtures that require separate ballast boxes are not permitted.

Post tops shall include full top reflectors and may include a house side shield if warranted by the pole location.

Color temperature shall be between 3,000K and 4,000K.

City of Alexandria 2021

# LIGHTING | STREET POLE

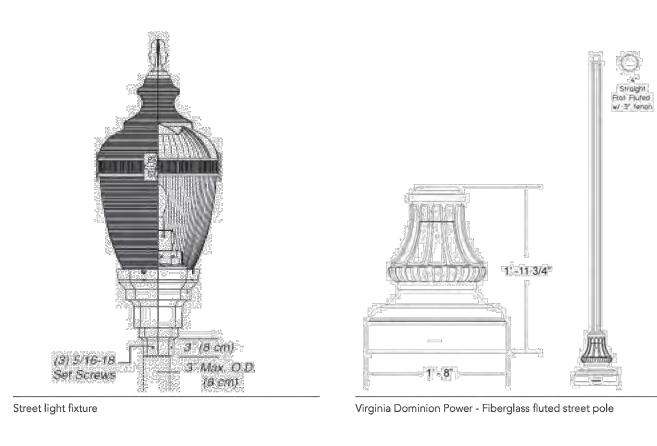
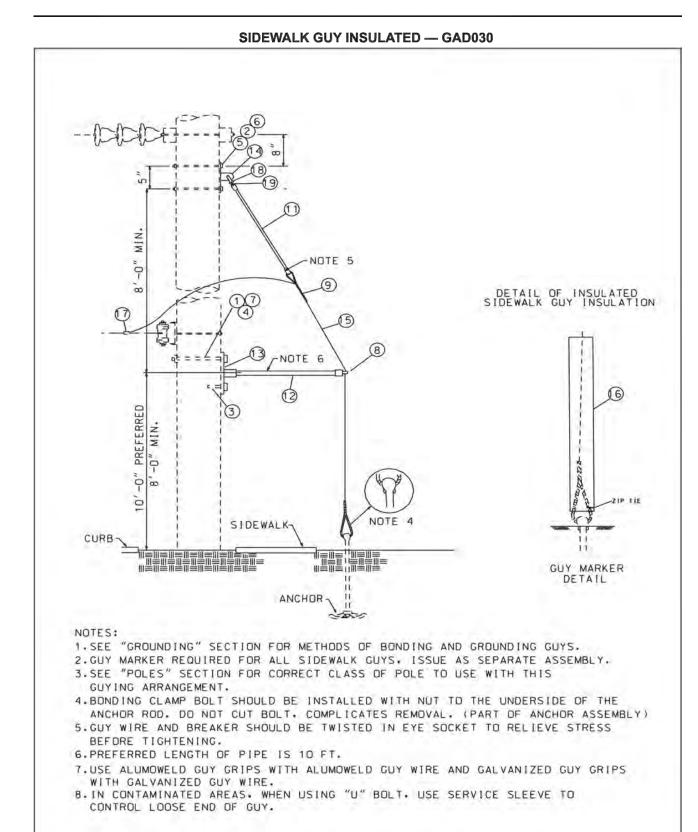


Image Footnotes (1) http://www.hadco.com

City of Alexandria 2021

#### **GUYS AND ANCHORS**



**Electric Distribution Overhead Construction Manual** 

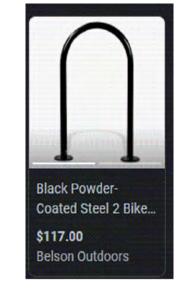
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Page 17 © November 2018 Dominion Energy

DRAWING FILE NAME: GADSOZ-DGN

#### RETAINING WALL NOTES:

- RETAINING WALL HEIGHTS RANGE FROM 0.5' TO 4.5'. FOR RETAINING WALL HEIGHTS LESS THAN OR EQUAL TO 3', SEGMENTAL BLOCK / GRAVITY WALL WITH NO GEOGRID CAN BE USED (PROVIDED THAT THERE ARE NO SURCHARGE LOADS)
- FOR WALL HEIGHTS GREATER THAN 3'. GEOGRID WILL BE REQUIRED AND THE LENGTH OF THE GEOGRID WILL BE EQUIVALENT TO THE HEIGHT OF THE WALL
- IF THERE ARE CONSTRAINTS THAT DON'T ALLOW FOR THE SEGMENTAL BLOCK / GRAVITY WALL, A REINFORCED CONCRETE WALL CAN BE USED



CG-12

GENERAL NOTES:

THE DETECTABLE WARNING SHALL BE PROVIDED BY TRUNCATED DOMES.

REQUIRED BARS ARE TO BE NO.5 X 8" PLACED 1 CENTER TO CENTER ALONG BOTH SIDES OF THE RAMP FLOOR, MID-DEPTH OF RAMP FLOOR. MINIMUM CONCRETE COVER  $1/\!\!/_2$ ".

CURB / CURB AND GUTTER SLOPE TRANSITIONS ADJACENT TO CURB RAMPS ARE INCLUDED IN PAYMENT FOR CURB / CURB AND GUTTER.

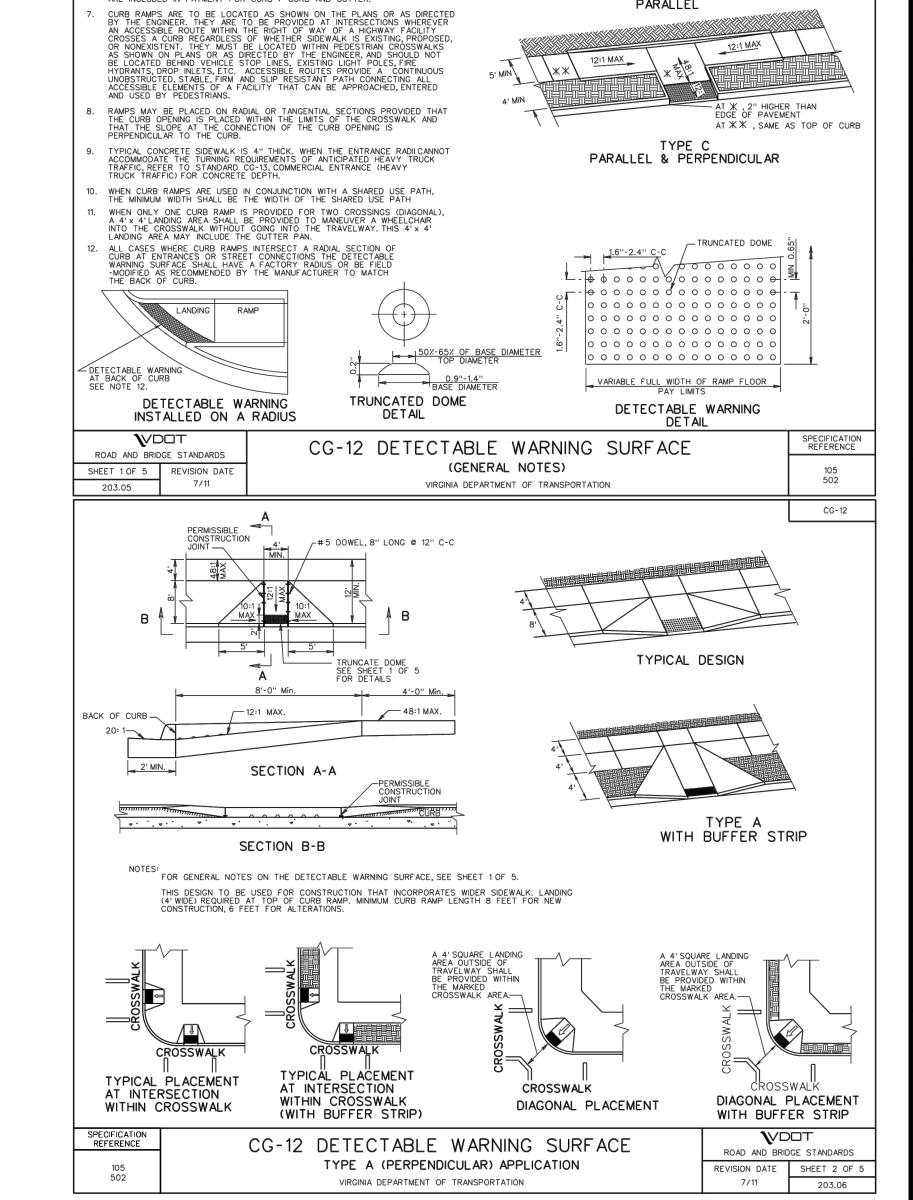
**BIKE RACK** 

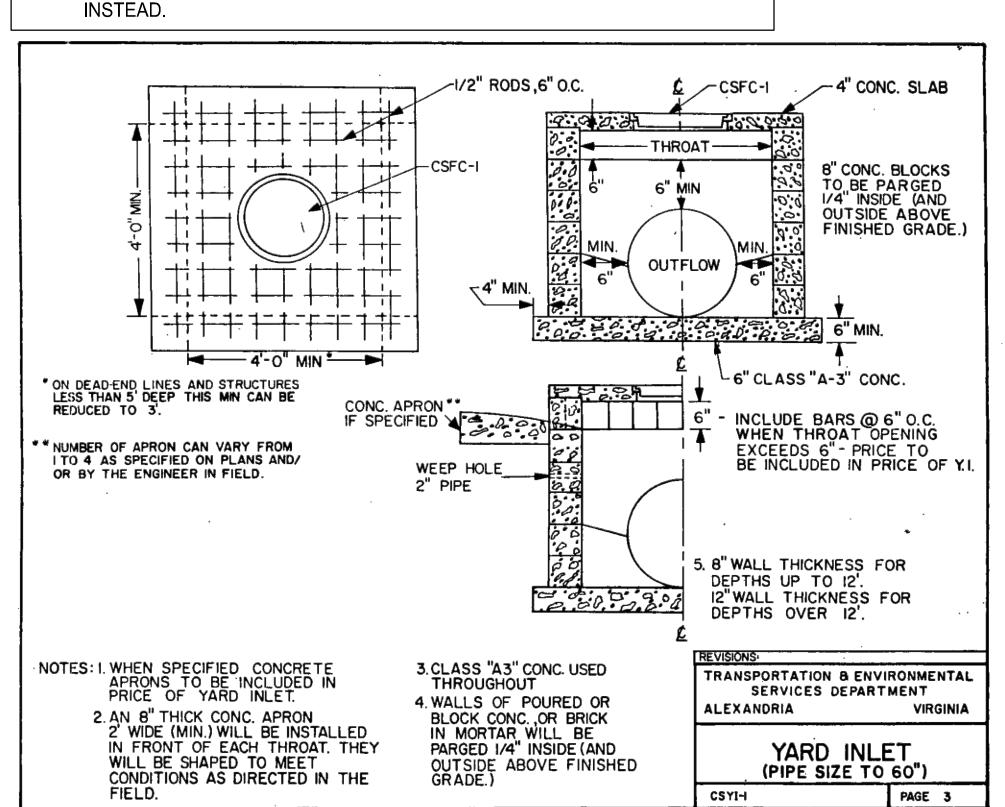


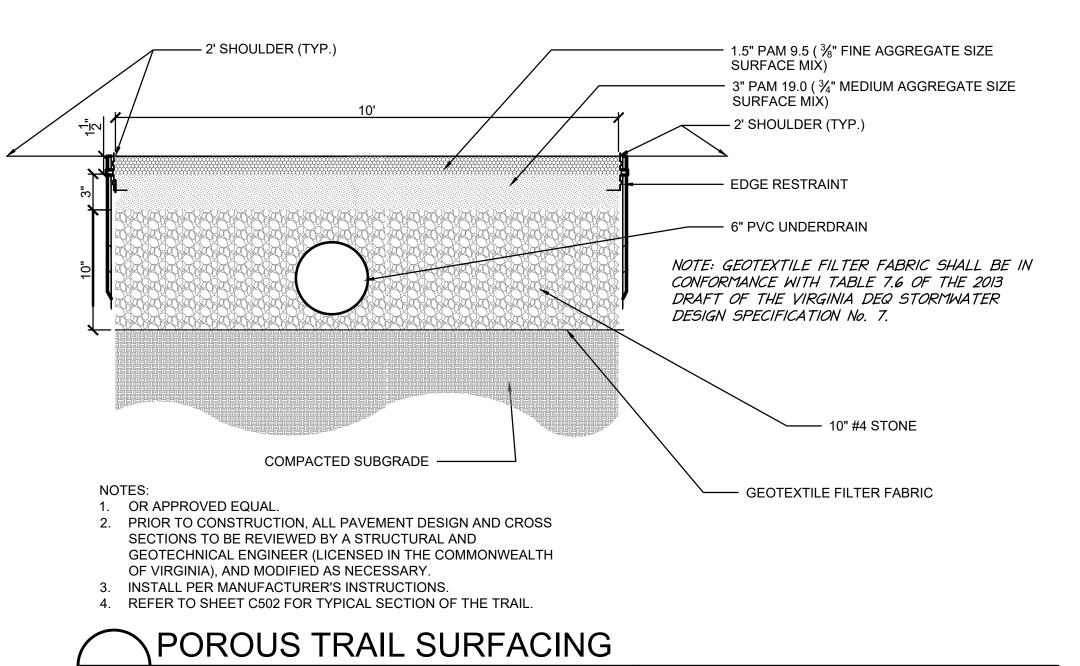
**BENCH** 



FIXIT STATION





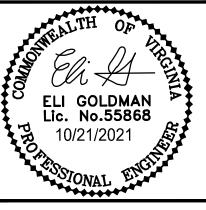


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TYPE A PERPENDICULAR







BIKE ATH GARI USE 30%

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PROJECT No.: 21266.001.00 DRAWING No.: 111028 DATE: 10/01/21

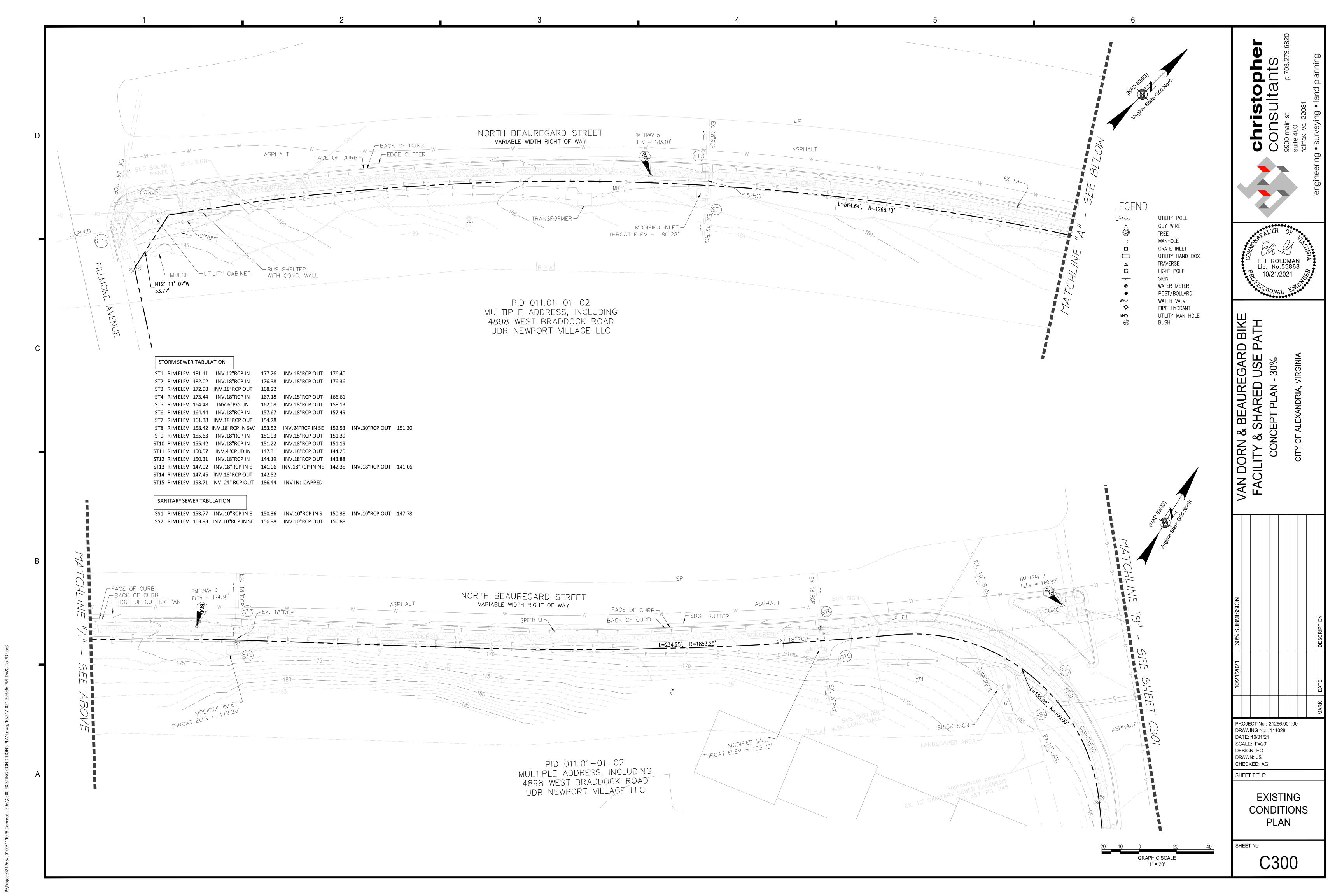
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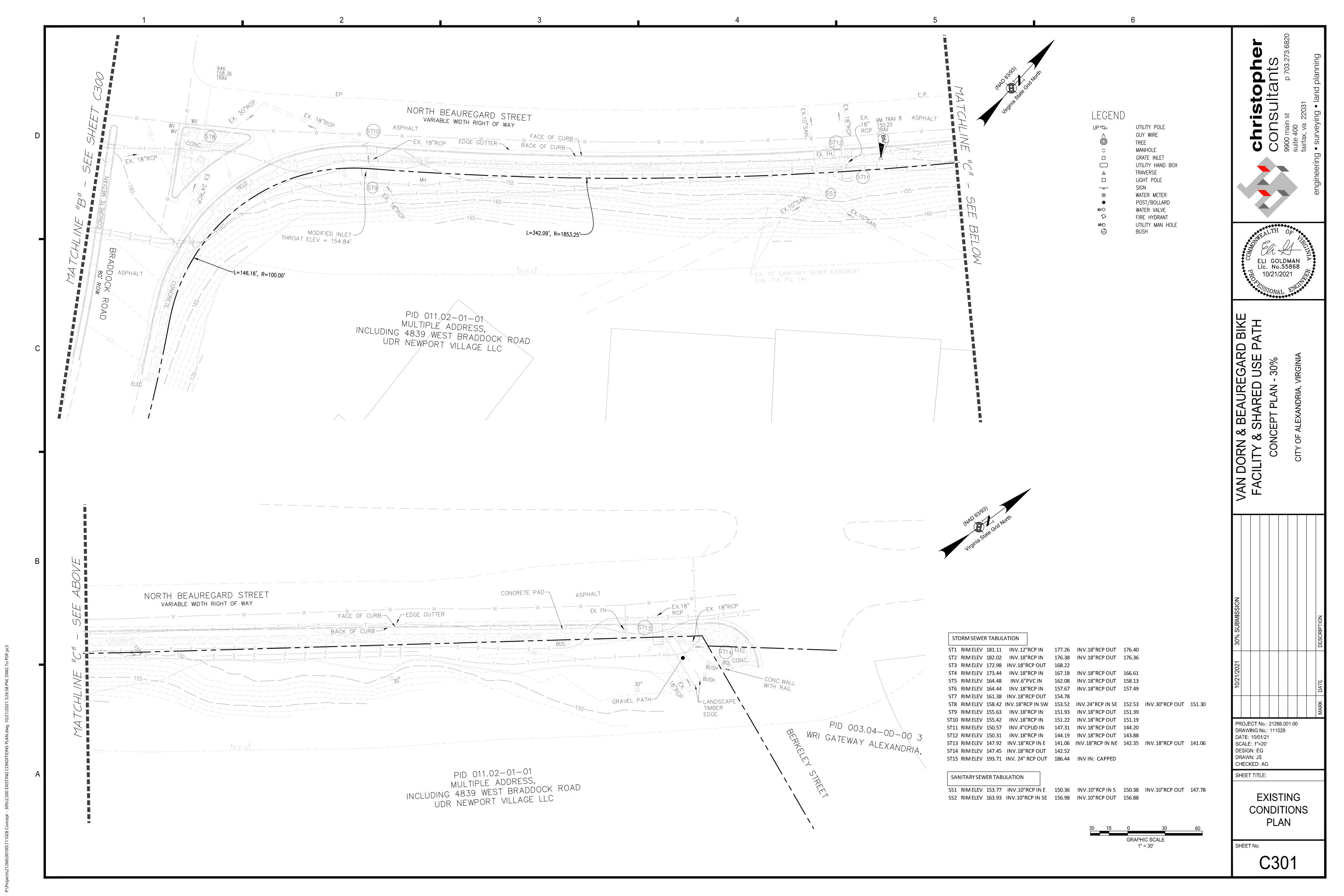
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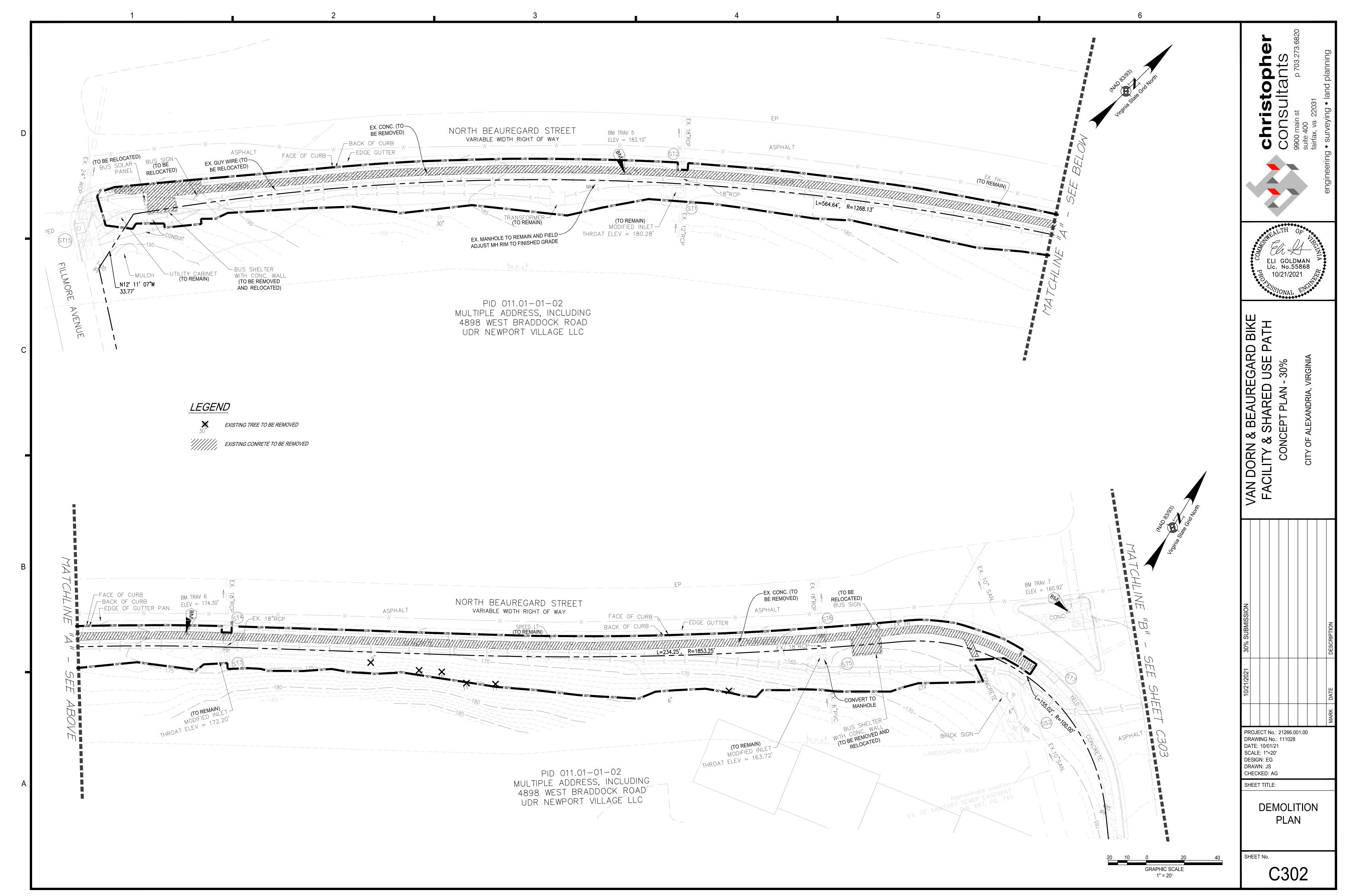
SITE DETAILS

1 1/2" = 1'-0"

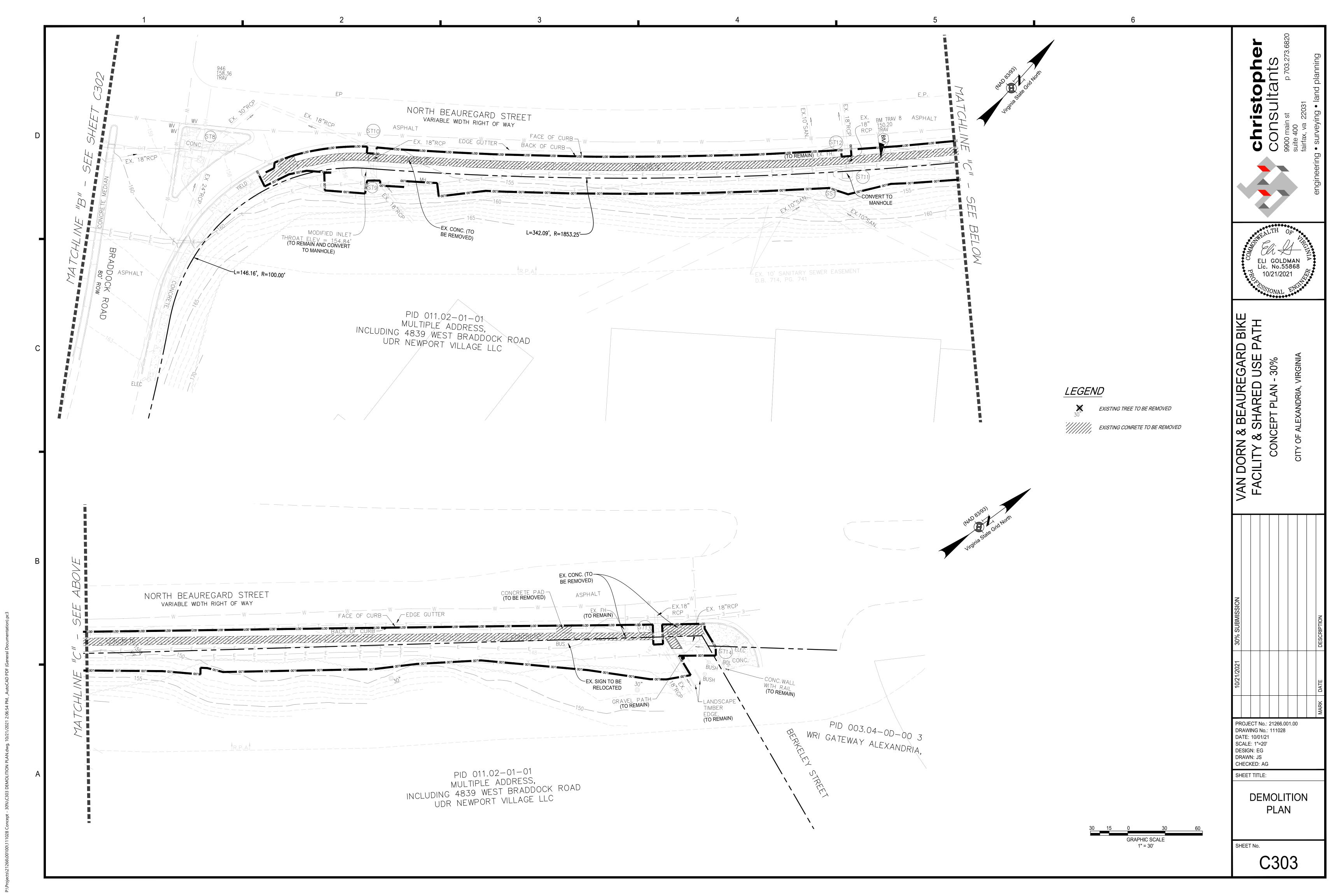
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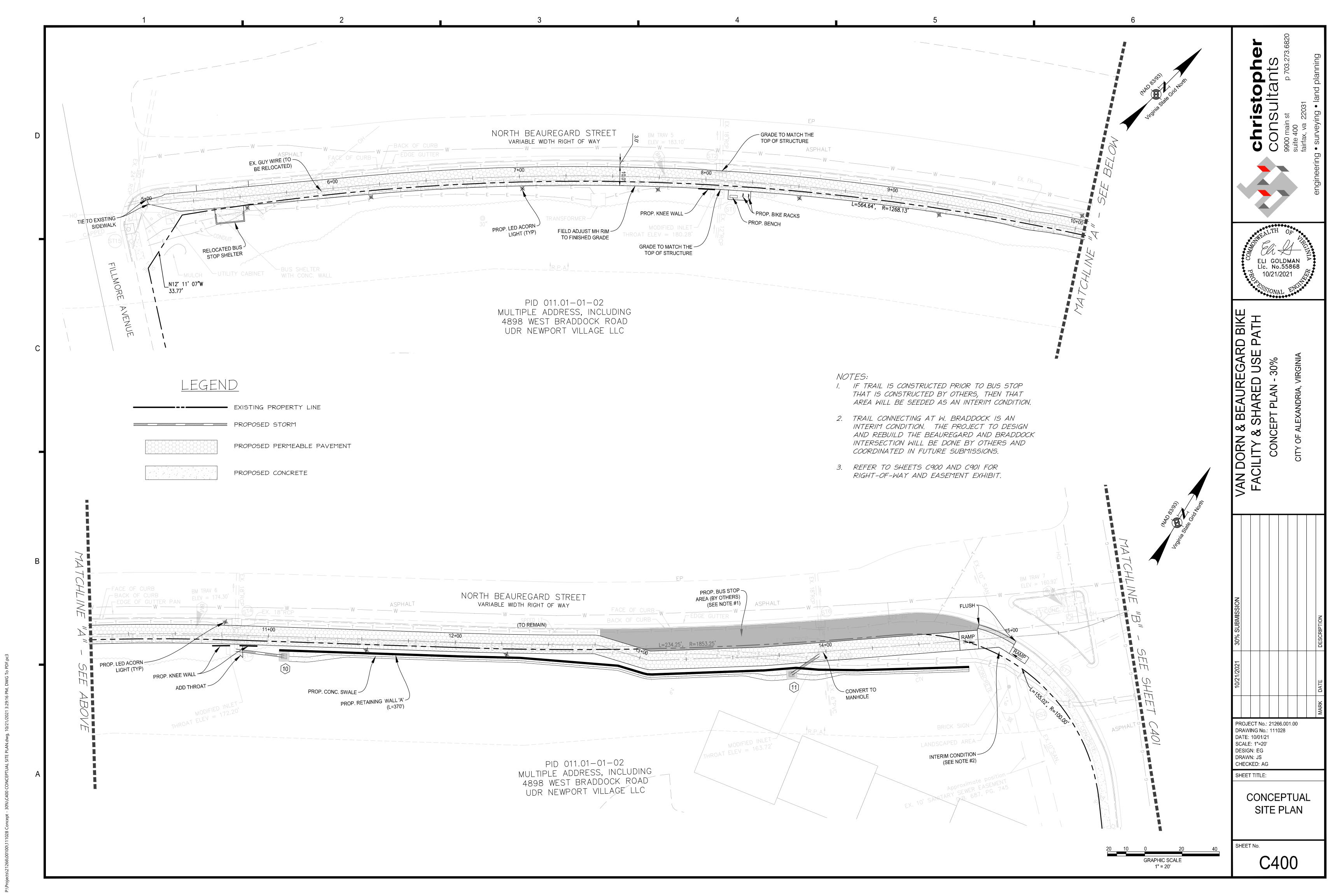


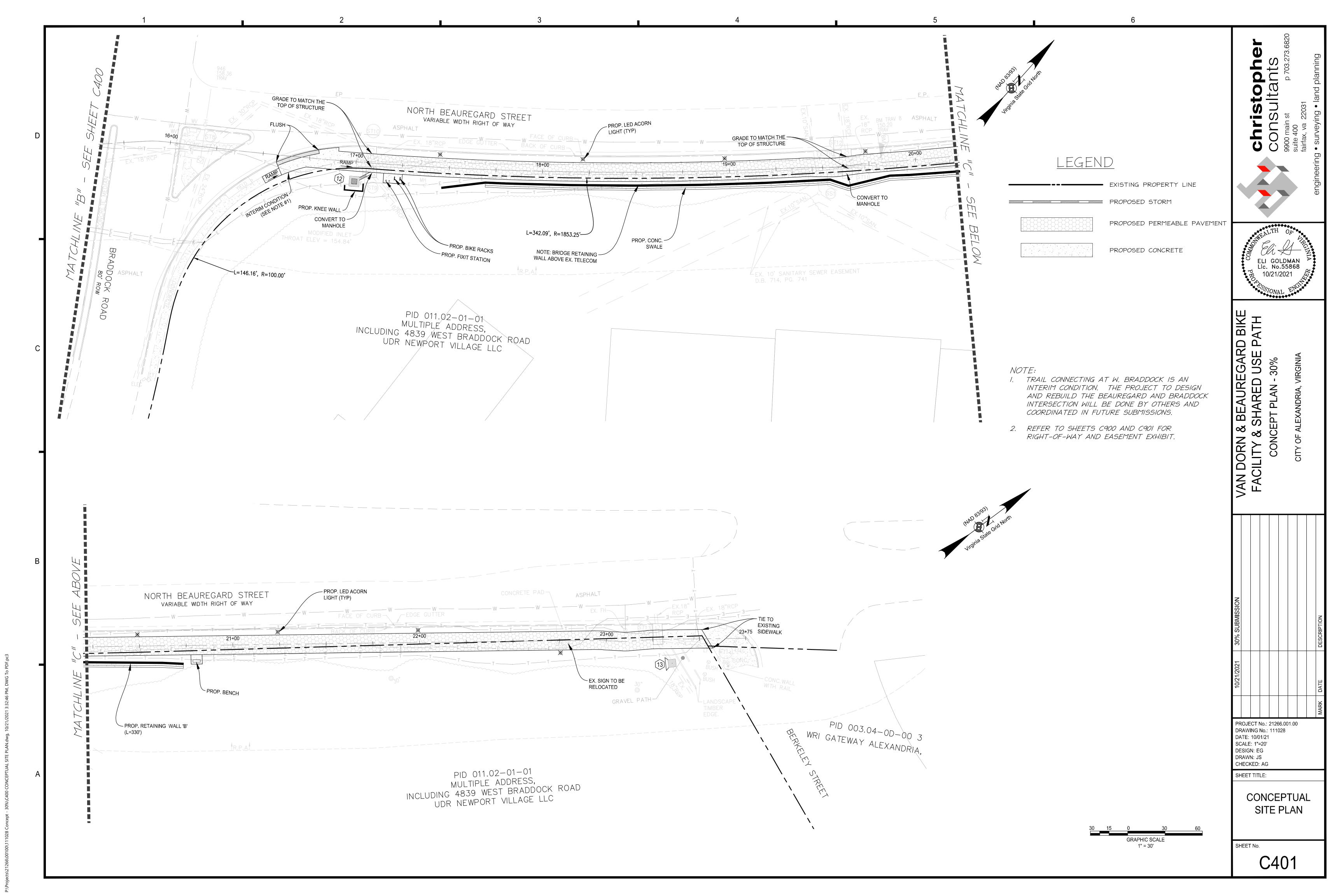


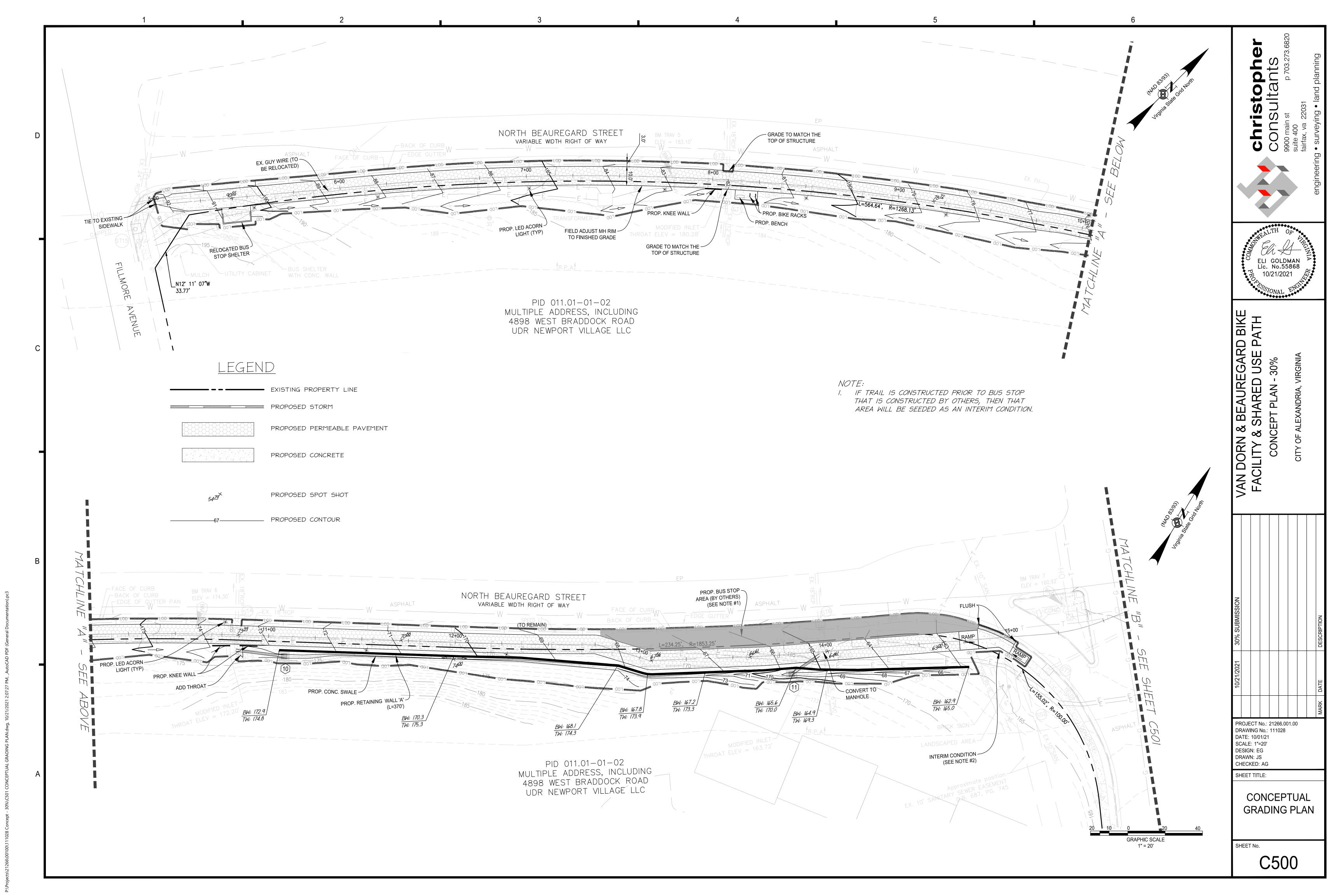


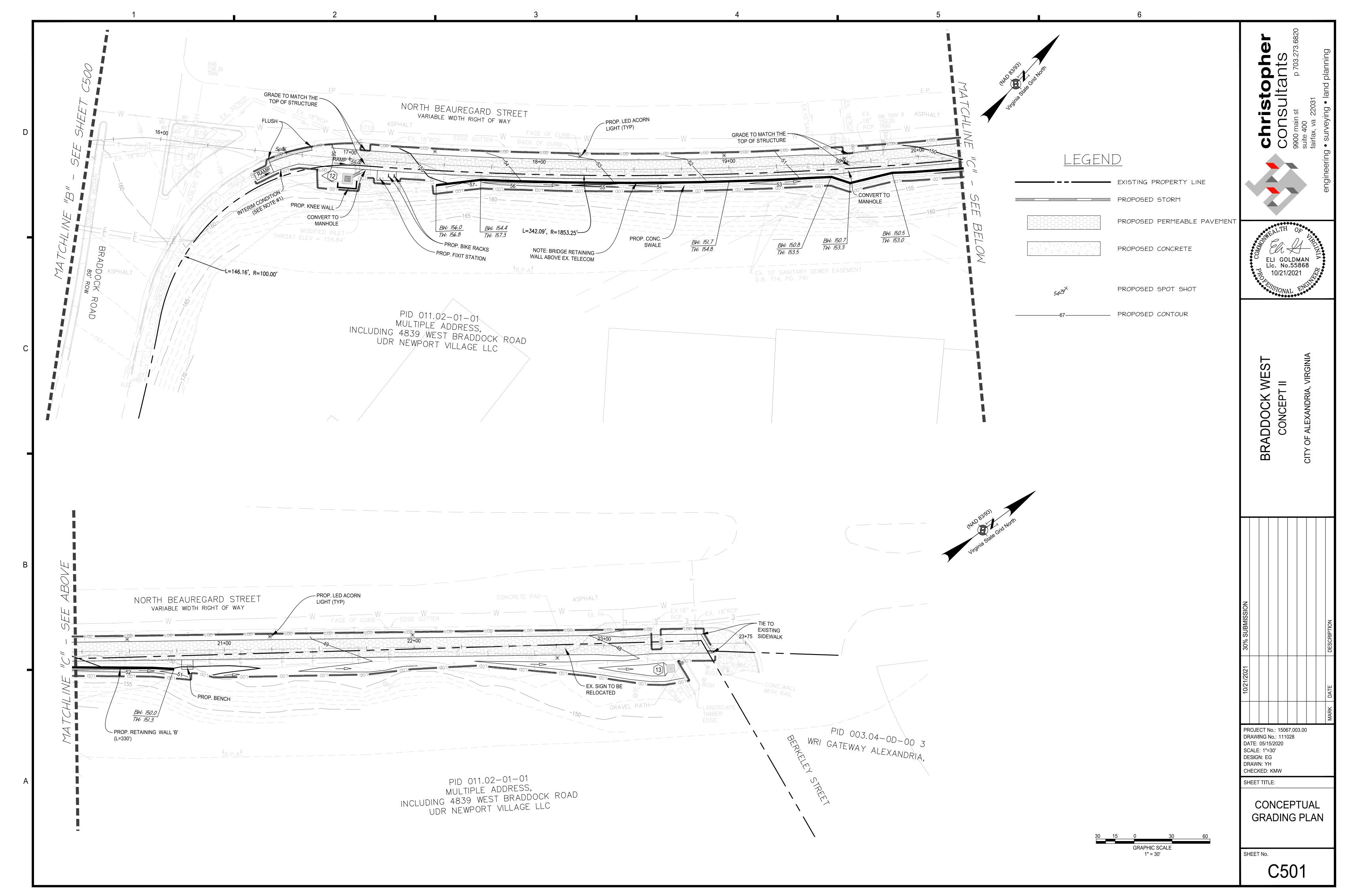
11028 Concept - 30%\C303 DEMOLITION PLAN.dwg, 10/21/20

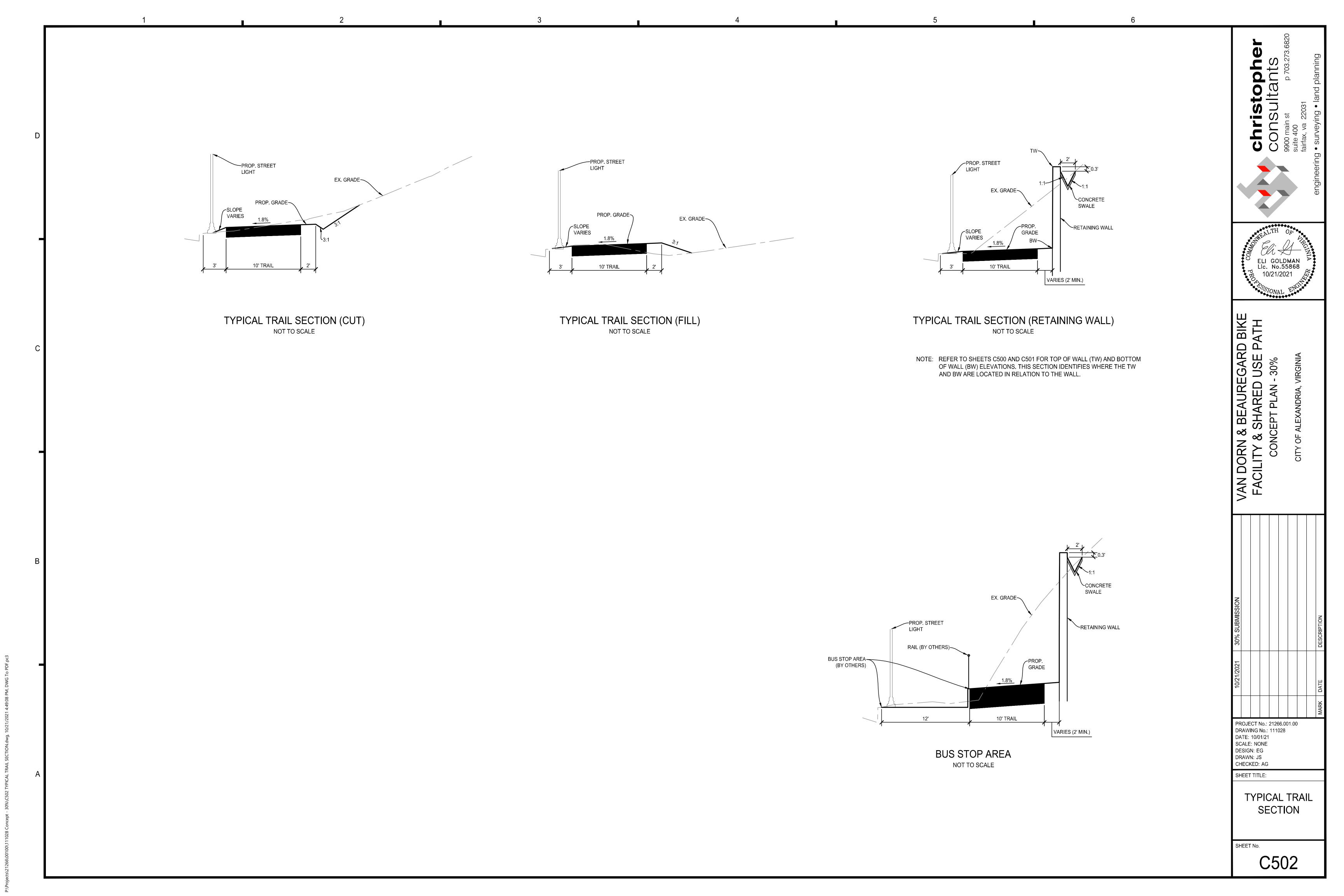


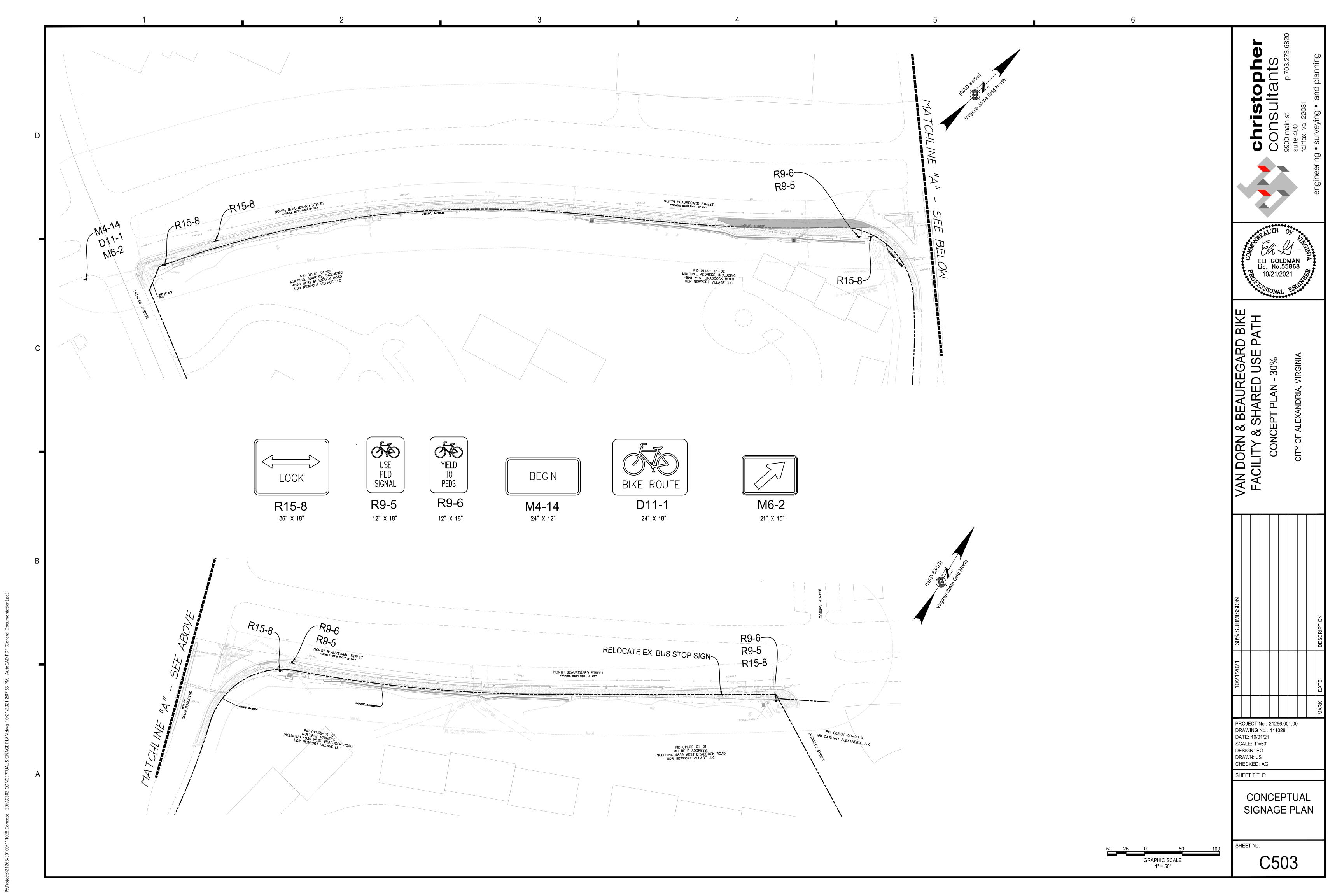


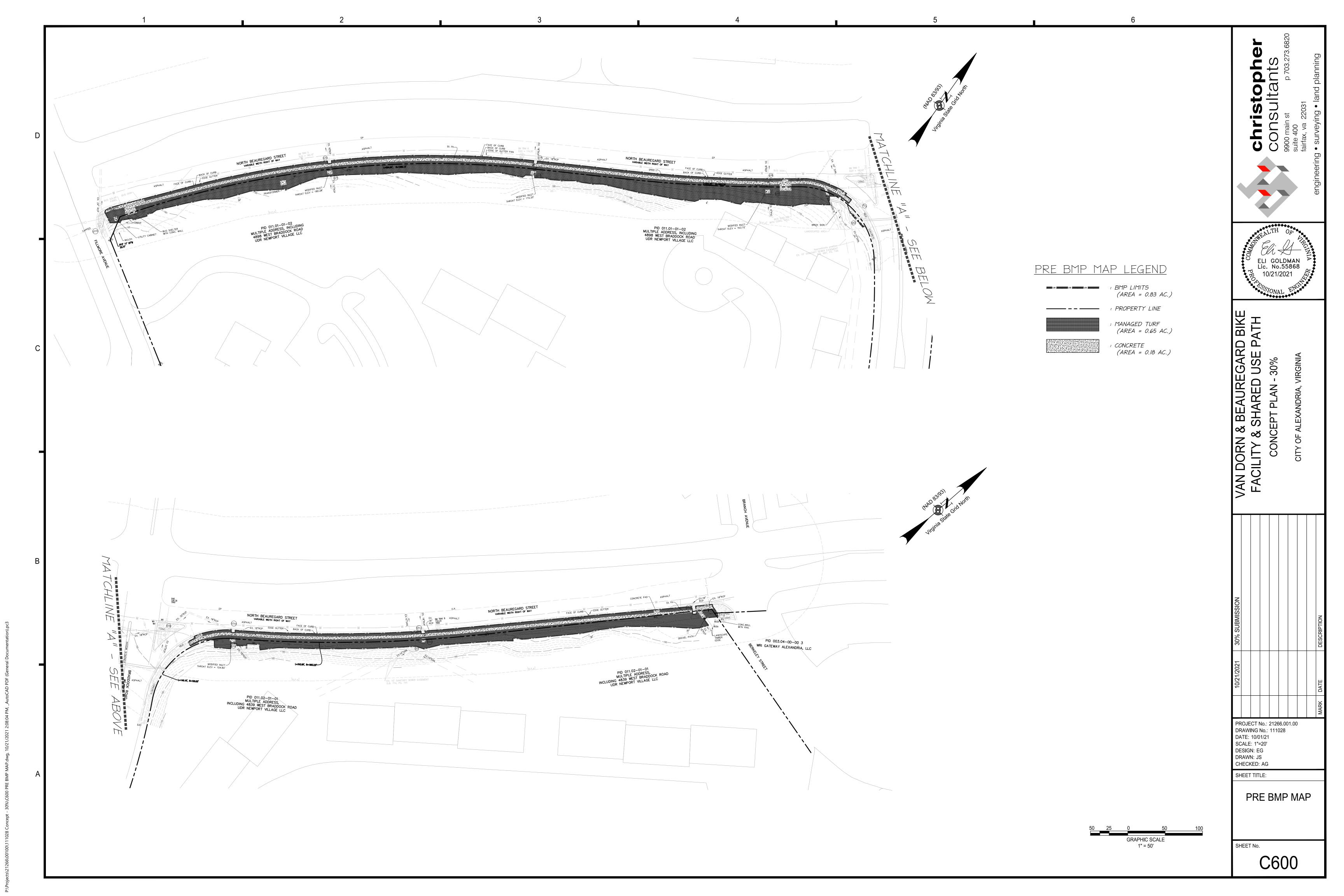


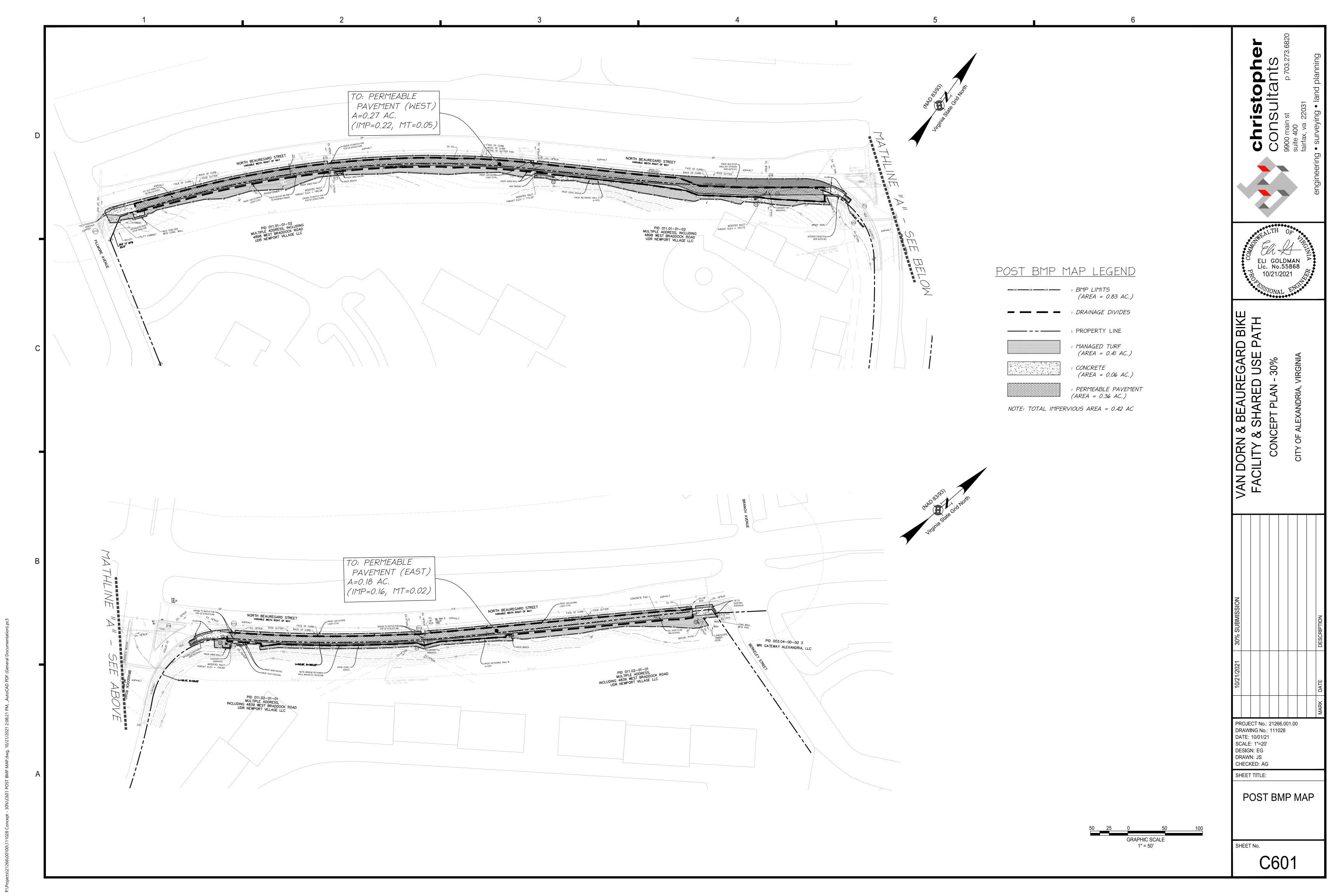












TP Load Reduction Required (lb/yr)

5.44

Pre-ReDevelopment TN Load

Nitrogen Loads (Informational Purposes Only)

0.48

Final Post-Development TN Load

(Post-ReDevelopment & New Impervious) (lb/yr)

8.18

Drainage Area A

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				0.07	0.07	0.25
Impervious Cover (acres)				0.38	0.38	0.95
	•	,		Total	0.45	

CLEAR BMP AREAS

Total Phosphorus Available for Removal in D.A. A (lb/yr) Post Development Treatment Volume in D.A. A (ft<sup>3</sup>)

Stormwater Best Management Practices (RR = Runoff Reduction)

Stormwater Best Managen Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit	Volume from Upstream	Runoff Reduction (ft <sup>3</sup> )	Remaining Runoff Volume (ft <sup>3</sup> )	Total BMP Treatment Volume (ft <sup>3</sup> )	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (Ib)	Untreated Phosphorus Load to Practice (Ib)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Select from dropdown lists- Downstream Practice to be Employed
3. Permeable Pavement (RR)													
3.a. Permeable Pavement #1 (Spec #7)	45		0.38	0	590	721	1,310	25	0.00	0.82	0.48	0.34	

Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	ок.
IMPERVIOUS COVER (ac)	0.38	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.38	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.07	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.00	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft<sup>3</sup>) 1,820

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft <sup>3</sup> )	590	0	0	0	0	590
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	0.86	0.00	0.00	0.00	0.00	0.86
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.48	0.00	0.00	0.00	0.00	0.48
TP LOAD REMAINING (lb/yr)	0.38	0.00	0.00	0.00	0.00	0.38

**Total Phosphorus** 

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	1.14
TP LOAD REDUCTION REQUIRED (lb/yr)	0.48
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.48
TP LOAD REMAINING (lb/yr):	0.66

REMAINING TP LOAD REDUCTION REQUIRED (lb/yr): \*\*No further TP load reduction required (Required - Achieved < 0.005 lb/yr)

**Total Nitrogen (For Information Purposes)** 

POST-DEVELOPMENT LOAD (lb/yr) 8.18 NITROGEN LOAD REDUCTION ACHIEVED (lb/yr) 3.46 REMAINING POST-DEVELOPMENT NITROGEN LOAD (Ib/yr)

		BMP V	RRM Drainage	Area Brea	akdown	
Drainage Area 'A' (Block A1)						
BMP Device	Total Area Treated	Impervious Area Treated	Pervious Area Treated		TP Removed (nonproprietary)	Notes
3.a. Permeable Pavement #1 (Spec #7)	0.38	0.38	0.00	0.48	0.48	
Total Treated	0.38	0.38	0.00	0.48	0.48	
Untreated	0.00	0.00	0.00	4		
Total	0.38	0.38	0.00			
	Gran	d Total Phosph	norus Removed	0.48	0.48	
]	Т	otal Phosphoru	s Requirement	0.48	0.31	

			Phosp	horus Load	Reduction	Requirements	
DA	Area (ac.)	Pre - Imp	Pre - Perv	Post - Imp (2)	Post - Perv	TP Reduction Required	TP Reduction Required with nonproprietary  BMPs (1)
<b>BMP Limits</b>	0.83	0.18	0.65	0.42	0.41	0.48	0.31
Maker							

(1) Per City's memo-to-industry 01-18, 65% of the total phosphorus removal required by the VRRM must be achieved through nonproprietary BMPs (green infrastructure). (2) City's WQIF requirement that 100% of the site's impervious area be treated or pay a fee in lieu of (\$2/sf) for any untreated impervious area. The impervious area in the Right-Of-Way is excluded from this requirement

CONCEPTUAL BMP (QUALITY) NARRATIVE: TO COMPLY WITH THE CITY AND STATE'S WATER QUALITY REQUIREMENTS, A MAJORITY OF THE PROPOSED TRAIL IS DESIGNED AS LEVEL I PERMEABLE PAVEMENT. AS SHOWN ON THIS SHEET, THIS APPROACH SATISFIES THE BMP REQUIREMENTS OF THE VRRM SPREADSHEET.

CONCEPTUAL SWM (QUANTITY) NARRATIVE: TO COMPLY WITH THE CITY AND STATE'S WATER QUANTITY REQUIREMENTS, DETENTION WILL BE PROVIDED IN THE STONE RESERVOIR LAYER OF THE PERMEABLE PAVEMENT. ENOUGH DETENTION WILL BE PROVIDED TO REDUCE THE POST-DEVELOPED RUNOFF RATE FOR THE 2-YEAR AND 10-YEAR STORMS LESS THAN PRE-DEVELOPED CONDITIONS.

ELI GOLDMAN Lic. No.55868 10/21/2021

EAUREGARD BIKE ARED USE PATH

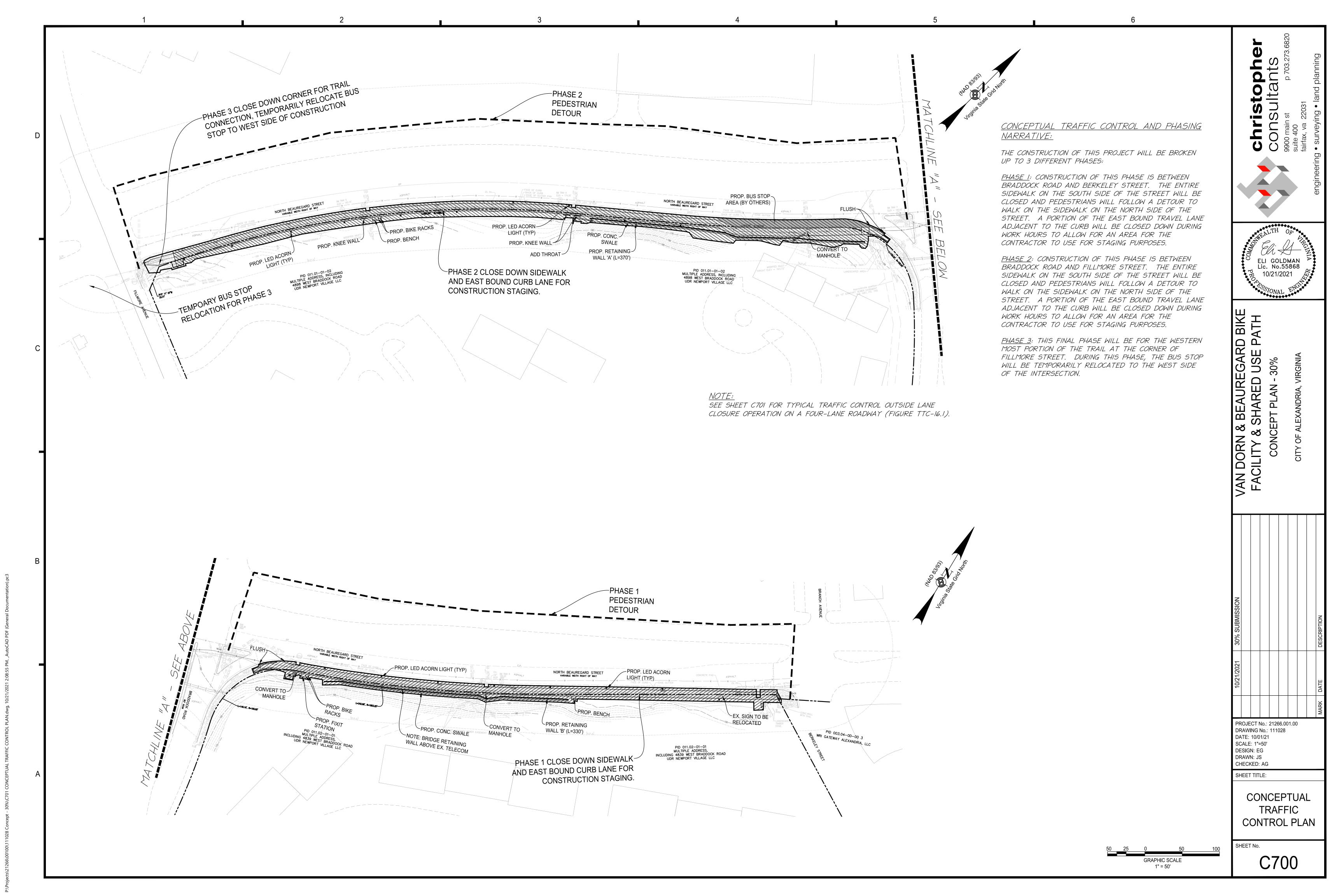
SHARED

PROJECT No.: 21266.001.00 DRAWING No.: 111028 DATE: 10/01/21 SCALE: 1"=20' DESIGN: EG DRAWN: JS CHECKED: AG

SHEET TITLE:

**BMP WATER** 

QUALITY



# (Figure TTC-16.1) END G20-2 (V) -80" - 120" SHADOW VEHICLE REQUIRED (TMA REQUIREMENT SEE NOTE 8) ILLUMINATED FLASHING (AMBER CAUTION MODE) TYPE B OR C NOTE 7 SEE \_ NOTE 5 ILLUMINATED FLASHING AMBER ARROW TYPE C SEE NOTES 3 & 6 SHOULDER TAPER SEE NOTE 5 SEE NOTES -SEE \_\_\_ NOTE 2 W9-2L LEFT SEE \_ NOTE 2 SEE \_ NOTE 2

# Typical Traffic Control Outside Lane Closure Operation on a Four-Lane Roadway (Figure TTC-16.1) NOTES

#### Standard:

01. On divided highways having a median wider than 8', right and left sign assemblies shall be required.

#### Guidance:

- 02. Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.
- 33. Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. For Limited Access highways a minimum of 1000' is desired.
- 04. All vehicles, equipment, workers, and their activities should be restricted to one side of the pavement.

#### Standard:

05. Taper Length (L) and Channelizing Device Spacing shall be:

	Taper L	ength (L	1						
Speed Limit	Lane Width (Feet)								
(mph)	9	10	-51	12					
25	95	105	115	125					
30	135	150	165	180					
35	185	205	225	245					
40	240	270	295	320					
45	405	450	495	540					
50	450	500	550	600					
55	495	550	605	660					
60	540	600	660	720					
65	585	650	715	780					
70	630	700	770	840					

highways shall be 1000 feet.

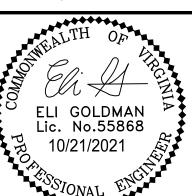
Location	Speed Limit (mph)	
	0 - 35	36+
Transition Spacing	20'	40'
Travelway Spacing	40'	80'
Construction Access*	90"	120'

On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.

- 26. An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane (see Figure TTC-18).
- 07. The buffer space length shall be shown in Table 6H-3 on Page 6H-5 for the posted speed limit.
- 28. A shadow vehicle with either a Type B or C arrow board operating in the caution mode, or at least one high intensity amber rotating, flashing, or oscillating light shall be parked 80'-120' in advance of the first work crew. When the posted speed limit is 45 mph or greater, a truck-mounted attenuator shall be used.
- 09. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or¹ oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or¹ oscillating lights.
- 10. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.

christopher Consultants

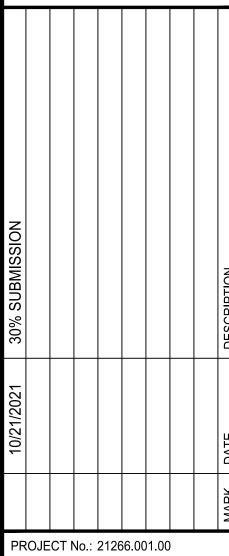




RED USE PATH

AN - 30%

FACILITY & SHARED USI CONCEPT PLAN - 30%



PROJECT No.: 21266.001 DRAWING No.: 111028 DATE: 10/01/21 SCALE: NONE DESIGN: EG DRAWN: JS CHECKED: AG

SHEET TITLE:

CONCEPTUAL TRAFFIC CONTROL PLAN

SHEET No.

